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THE AMERICAN ELEVATOR AND GRAIN TRADE.

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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XXV.

CHICAGO, ILLINOIS, MAY 15, 1907.

No. 11. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

Our New Steel Shop

THE BEST IN THE WEST

Is Ready for Business

Spouts, Hoppers, Boots, Steel Elevator Legs, Conveyor Boxes, Loading Spouts, Buckets, Tanks, Etc.

If you want anything made of
STEEL

Send us your specifications. Our machine shop facilities have also been greatly increased.

Stephens-Adamson Mfg. Co.

Main Office and Works, AURORA, ILL.

NEW YORK Office, 41 Wall St.

CHICAGO Office, First National Bank Bldg.

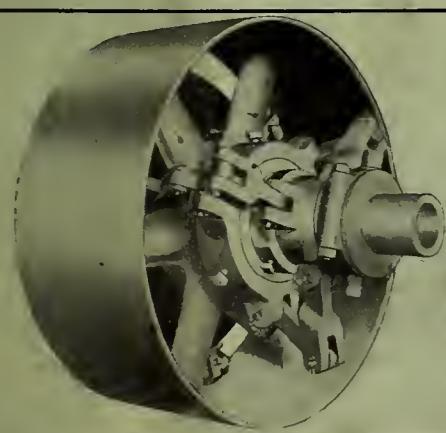
Specially
Constructed
**ELEVATOR
BELTING**

THE BEST MADE
ALSO
The Cheapest
Get Our Prices

THE GUTTA PERCHA
AND
RUBBER MFG. CO.
214-226 Randolph St.
CHICAGO



Skillin & Richards Mfg. Co., Chicago



Our New
Muir Improved
Friction Clutch
Pulley for
Gas and
Gasoline
Engines.
Write for Prices.

Manufacturers of
Complete Grain Elevator Equipments,

Including Elevator Boots, Buckets, Turnheads, Belting, Shafting, Pulleys, Bearings, Friction Clutches, Car-pullers, Carloaders, Sprocket Wheels, Spiral Conveyor, Spouting, Etc., Etc.

Send us your specifications for Estimate.
Write for General Catalog.



Manufacturers of Salem Elevator
Buckets. A complete stock
carried.

ALFALFA

The Williams Pat. Alfalfa Hay

CUTTER and GRINDER

WE BUILD COMPLETE PLANTS—BUILT 12 PLANTS IN 1905

Write For Bulletin No. 6

THE WILLIAMS PAT. CRUSHER & PULVERIZER CO.

Old Colony Bldg.
Chicago

2705 N. Broadway
St. Louis

This is the season of the year when grain dealers are compelled to load old, dilapidated cars with grain

The Loss by Leakage in Transit Each Year is Enormous

Save your grain and increase your profit by using
KENNEDY'S PAPER CAR-LINER. Cost \$1.30 per car.

FRED W. KENNEDY

SHELBYVILLE,

INDIANA

New Process Corn Shellers and Cleaners

SEND FOR
CATALOGUES

STYLE F
THREE SIZES



are standard the world over.

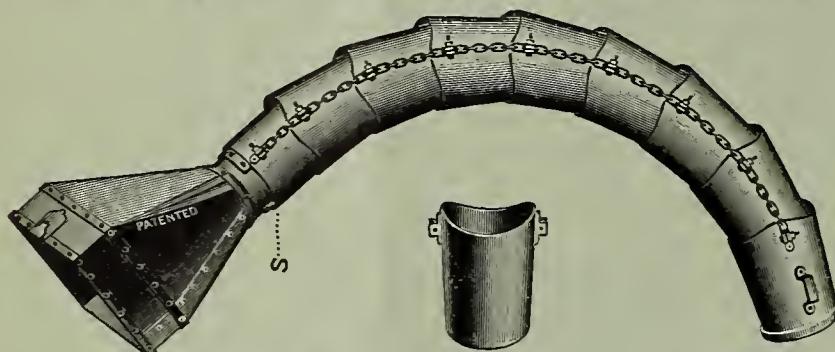
OUR WAREHOUSE STYLES for Grain Elevators or Mills are made in three sizes, either with or without cleaning apparatus, and in styles for handling either shucked or unshucked corn.

They require less space and power according to capacity, crack less corn, break cobs less, waste less corn, clean the corn more perfectly, clean the cobs in more merchantable condition for fuel than any other shellers in the world.

Machinery and Supplies
of every kind for the grain man

MARSEILLES MANUFACTURING CO., Marseilles, Ill.

Secure the Latest and Most Practical Flexible Spout
FOR YOUR ELEVATOR

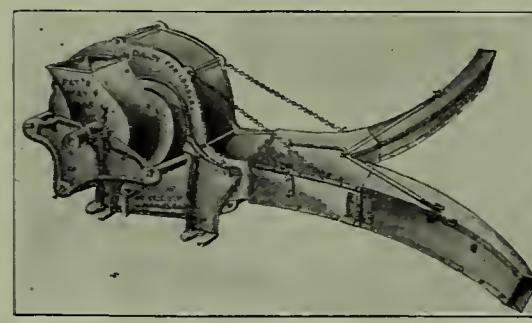


The above cut represents the Gerber Patent Flexible Chain Telescope Car Loading Spout, the only Spout where a joint can be removed when worn out and another put in its place easily without disturbing either end. Extra joints can be secured for repairs at a minimum cost. Swivel joint at S.

J. J. GERBER, Minneapolis, Minn.

The Daisy Car Loader

Loads all kinds
of GRAIN



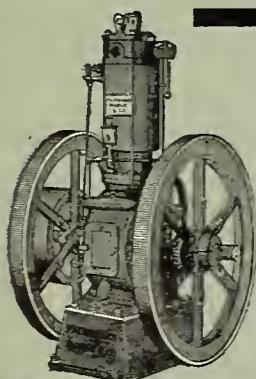
The grain entering hopper of loader falls on inner surface of a drum, which carries it once around against a deflecting plate, the centrifugal force being sufficient to drive grain through a pair of dividing spouts, loading both ends of the car to the roof. During the process of circulation the grain is being cleaned and polished. Damp and musty oats are separated and cleaned before entering car, which gives a better grading. Price on No. 1 loader, capacity 20 to 30 bus. per minute, \$40.00; No. 2, capacity 25 to 35 bus. per minute, \$45.00; Larger loaders with more capacity, prices on application.

Mfd. by Welge & Lilly
Maree, Ill.

SEEDS

THE ALBERT DICKINSON CO.

.....DEALERS IN.....
GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,
PEAS, POP CORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.
CHICAGO, ILL. BRANCH: MINNEAPOLIS, MINN.



Fairbanks-Morse
GAS, GASOLINE, KEROSENE
OR ALCOHOL ENGINES

The cheapest and most reliable power for elevator or mill. By using them one man can often run the whole elevator. Ask for catalog No. EV 544.

Fairbanks Scales

Have been steadily improved for 75 years and represent the highest product of the scale builder's art. Ask for catalog No. 544 SC.

Fairbanks, Morse & Co.

Franklin and Monroe Streets
CHICAGO, ILLINOIS

AUTOMATIC SCALES
TRACK SCALES
WAGON SCALES
HOPPER SCALES
PLATFORM SCALES
COUNTER SCALES

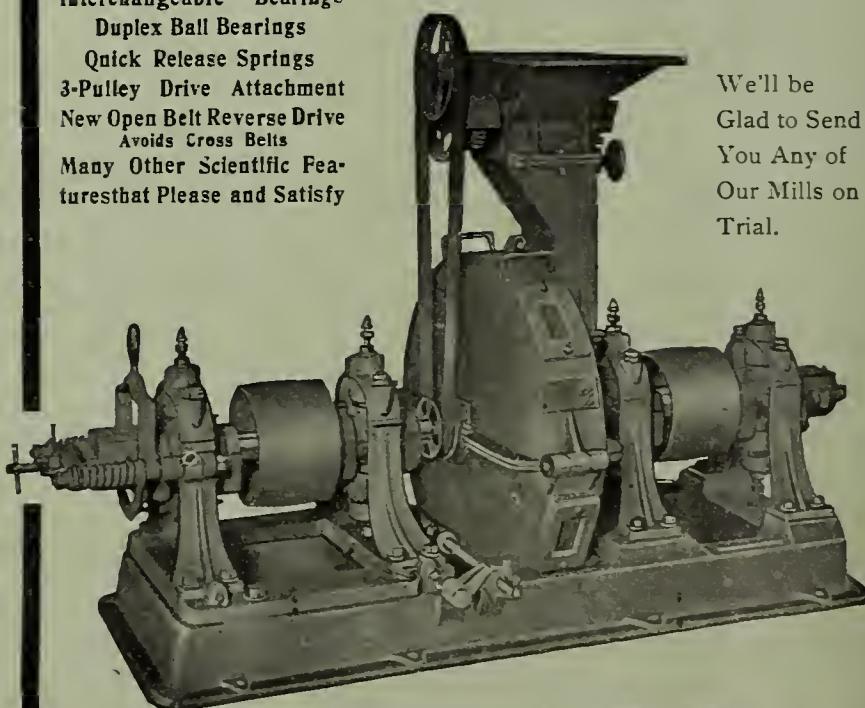


SCIENTIFIC
ATTRITION MILLS

Exclusive Features
Interchangeable Bearings
Duplex Ball Bearings
Quick Release Springs
3-Pulley Drive Attachment
New Open Belt Reverse Drive
Avois Cross Belts
Many Other Scientific Features that Please and Satisfy

GRIND FOR
PROFIT

We'll be
Glad to Send
You Any of
Our Mills on
Trial.



A Live Member of That Vigorous "Best on Earth" Family

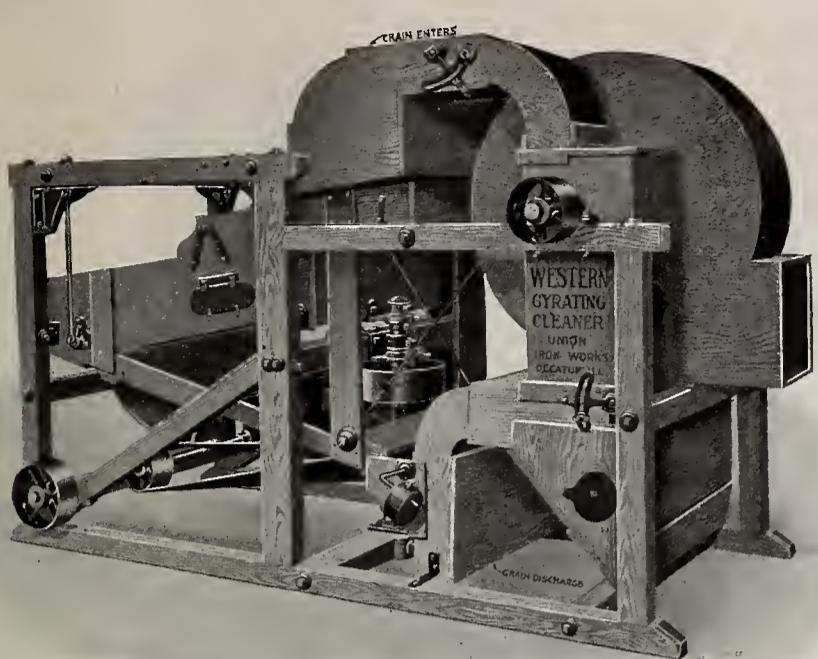
Grinds Ear Corn, Chop Feed, Bran, Offal and all
Small Grains, Cracks Corn.

Fast, Fine Grinding

SEND FOR CATALOGUES

THE FOOS MFG. CO.
SPRINGFIELD, OHIO.

The "Western" Gyrating Cleaner



DO You Expect to Remodel Your Elevator?
You Intend Putting in a New Cleaner?

We ask these questions, first, because we are in the business of furnishing machinery for just such plants as yours. Second, because we have just put on the market our New Gyrating Cleaner, which is the acme of perfection in cleaning machines.

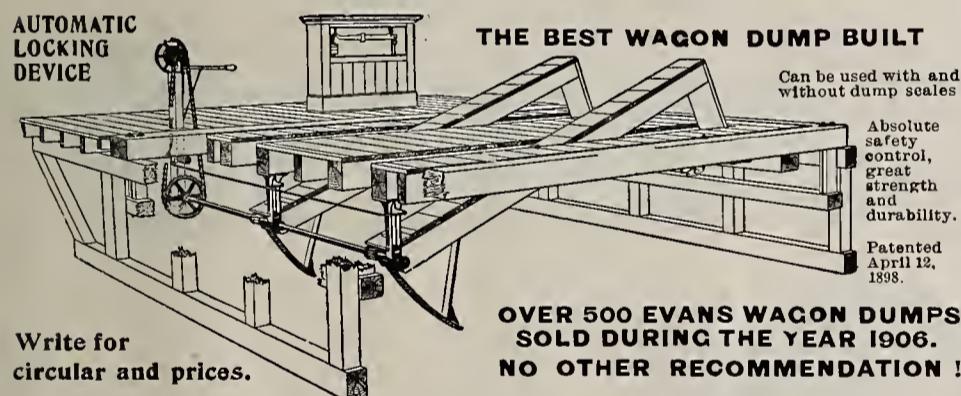
Do you want to realize the very top market price for your grain? Then put in a cleaner that will take out all dust, dirt, small pieces of cob, etc., and save all the grain and put it on the market in first-class condition. You will accomplish this result by trying a Gyrating Cleaner.

We also manufacture the "Western" Corn Sheller, "Western" Rolling Screen Cleaner, "Western" Combined Shellers and Cleaners and the "Western" Friction Clutch. A full line of Elevator Buckets, Belts, Belting, Pulleys, Shafting, Boxes, etc. If you expect to build new or remodel, write us for prices.

Complete Stock carried in Kansas City, Mo., 1221-1223 Union Ave.

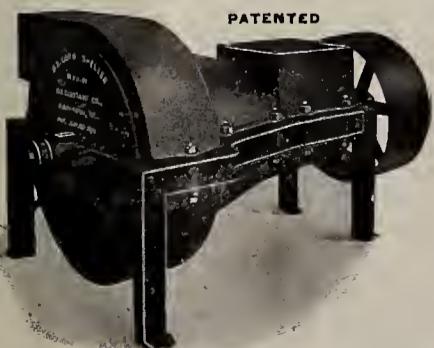
UNION IRON WORKS - - - - - **DECATUR, ILL.**

The Evans Controllable Wagon Dump



MOULTON & EVANS,
909 E. 18th Street, Minneapolis, Minn.

THIS IS THE SHELTER TO BUY



if you want the

BEST FOR LEAST MONEY

Write us and save
yourself regrets.

Chicago Representatives
NOTH-SHARP-SAILOR CO.
1329-30 Monadnock Block

Oklahoma Representative
J. A. HORN
322 Bassett Building
Oklahoma City, Okla.

United States Corn Sheller

Send for Our Catalogue and Latest Discounts
Complete Elevator Equipments

B. S. CONSTANT CO., BLOOMINGTON, ILL.

AIR DRIED GRAIN

(NOT KILN DRIED)

The Ellis Drier insures even and perfect drying at low temperatures. The only machine where the air passes through the grain uniformly and reaches every kernel. Built in all sizes from five bushels' capacity and up.

"Ellis Grain Drier"

ELLIS DRIER CO.

715-719 Postal Telegraph Bldg.

Chicago

NO TROUBLE

if your elevator is equipped with machinery of the

Midland Machinery Co. Make

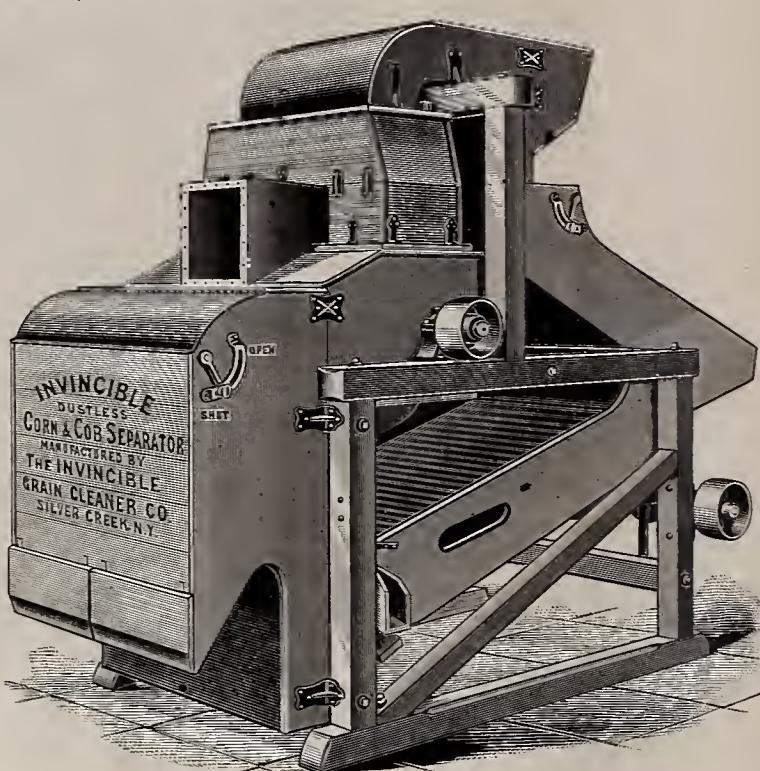
OUR motto has been, constantly, the best that we can manufacture, with the result that grain men ordering equipments from us are assured of an economically working elevator and one that will be equal to every emergency which the modern house is called upon to meet.

Let us figure with you on your equipment, whether only one machine is needed or full outfit. Our catalogue mailed on request.

MIDLAND MACHINERY CO.
MINNEAPOLIS, MINN.

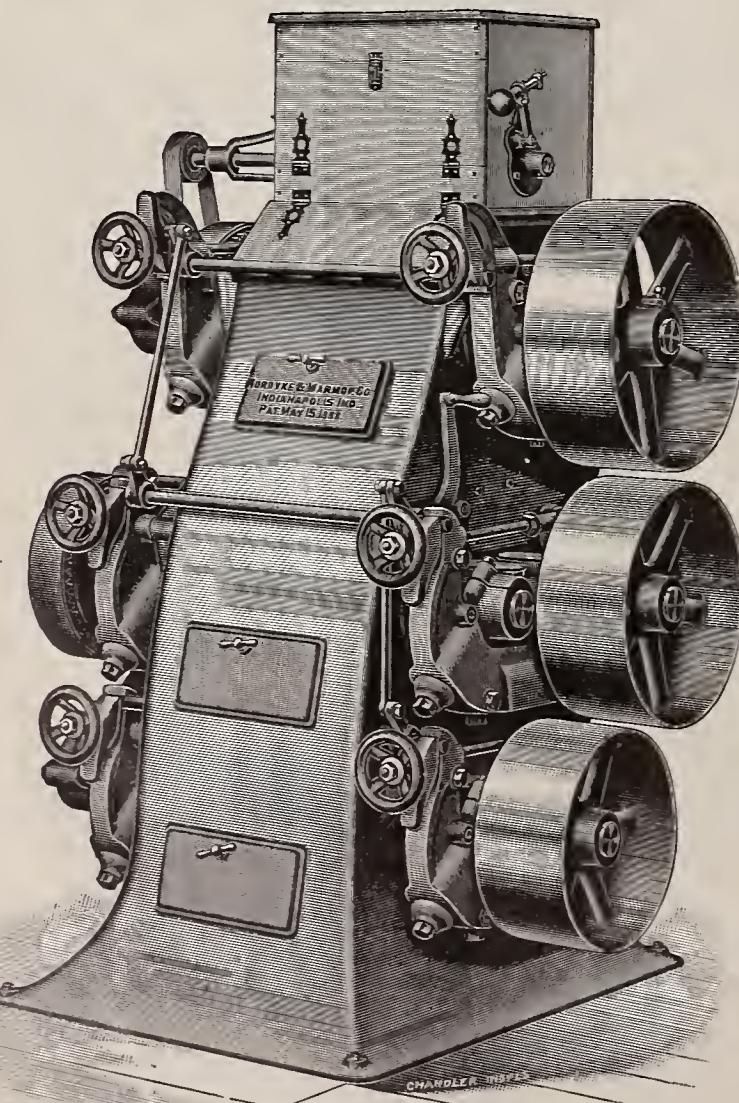
CLEAN YOUR CORN

This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.
It is the most popular corn and cob separator on the market, the result of its extremely nice work. Order now.



INVINCIBLE GRAIN CLEANER COMPANY
SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY
W. J. Scott, 512 Traders' Bldg., Chicago, Ill.
Edward A. Ordway, 225 Exchange Bldg., Kansas City, Mo.
The Strong Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
N. B. Trask, Lochiel Hotel, Harrisburg, Pa.
Portland Iron Works, Portland, Ore.



The N. & M. Co.

THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

ELEVATOR SUPPLIES

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

Nordyke & Marmon Company

America's Leading Flour Mill Builders

Established 1851

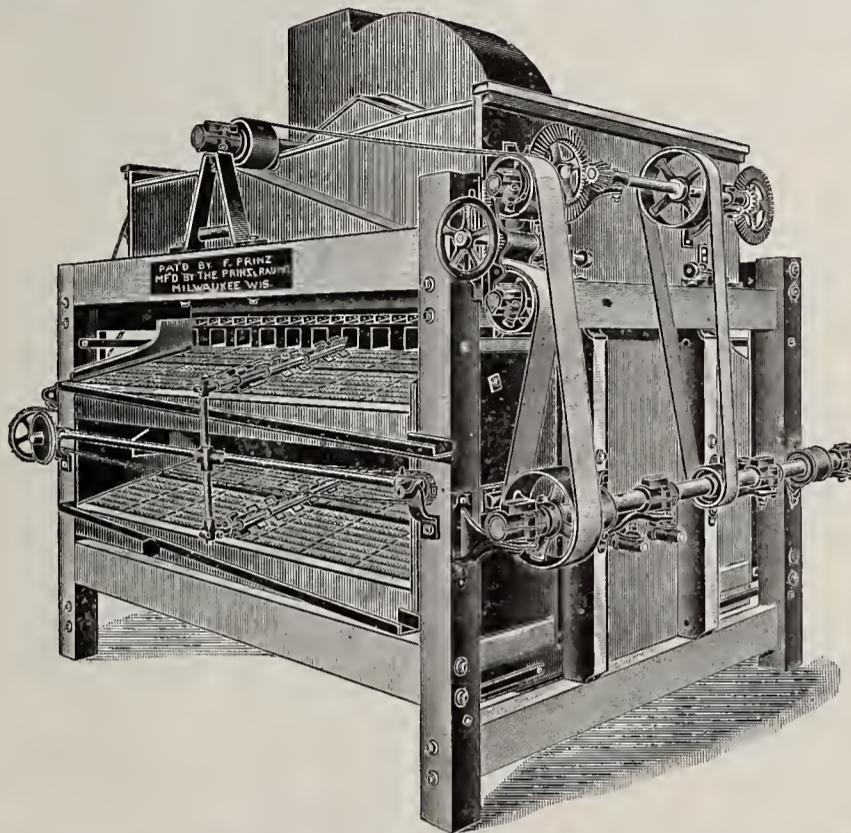
INDIANAPOLIS, IND.

SAVE MONEY

BY INVESTING IN A

PRINZ AUTOMATIC RECEIVING SEPARATOR

Sheet Steel Sieves that do not wear out. Patented Automatic Sieve Cleaner, Dispensing Entirely With Hand Cleaning.



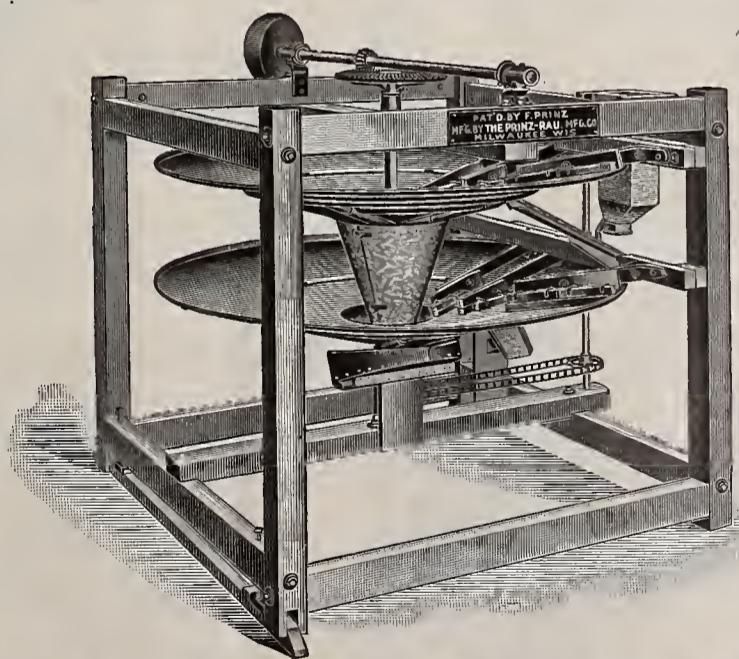
Perfect Separations Made Without Loss of Good Grain. Largest Capacity Obtained in the Smallest Space With Least Power.

MAKE MONEY

BY PUTTING IN THE NEW

PRINZ MUSTARD SEED SEPARATOR

The Only Machine That Will Separate Mustard Seed From Grass Seed and Wild Buckwheat, Making a Perfect Separation.



Pure, Clean Mustard Seed Commands a High Price. Full Particulars Can Be Obtained by Addressing

THE PRINZ & RAU MFG. CO.
MILWAUKEE, WIS., U. S. A.



HELICOID

Helicoid conveyor has a stronger flight and a heavier pipe than the same diameter of old style conveyor, and

Helicoid flight and pipe are put together so they support and strengthen each other.

Helicoid flight has a shovel edge. Other has blunt edge.

Helicoid flight is one continuous strip of metal end to end of pipe. Other is short sections lapped and riveted together every turn or half turn around the pipe.

Helicoid is a smooth, nicely-balanced spiral, and has no joints to wear out and open up.

Helicoid requires fewer repairs, and less power to drive it.

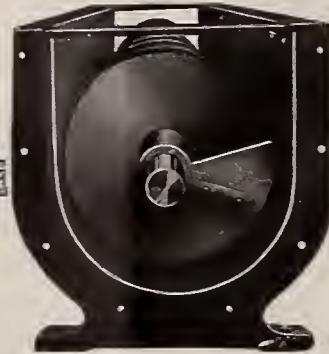
Helicoid costs no more than inferior kinds of conveyor; it's all-round satisfaction at the same price.

Ask about our Steel Conveyor Boxes, too.

H. W. Caldwell & Son Co.

17th St. and Western Ave., Chicago

BRANCH OFFICE:
No. 95
Liberty St.,
New York City.



AGENTS:
Woodward, Wight
& Co.,
New Orleans, La.

EXPERIENCE?

You amuse me. Just because a "just as good" salesman got your ear and order years ago, you are not going to try again—are going to use "what father did." Now I know you have had to give your respect to some of your competitors. They are using Leviathan Belts for elevating and have been doing so for ten or fifteen years and they say they have no trouble with them. Who? The Main Belting Co. of Philadelphia will tell you. I haven't the list at hand.

C. C. T.

A COMPLETE LIST of Grain Elevators and Grain Storage Warehouses

IN CHICAGO AND COOK COUNTY

with notes of their construction, terminal facilities, etc., for use of railroads, commission men, insurance companies and others. Compiled and published by the "American Elevator and Grain Trade." Price 25 cents.

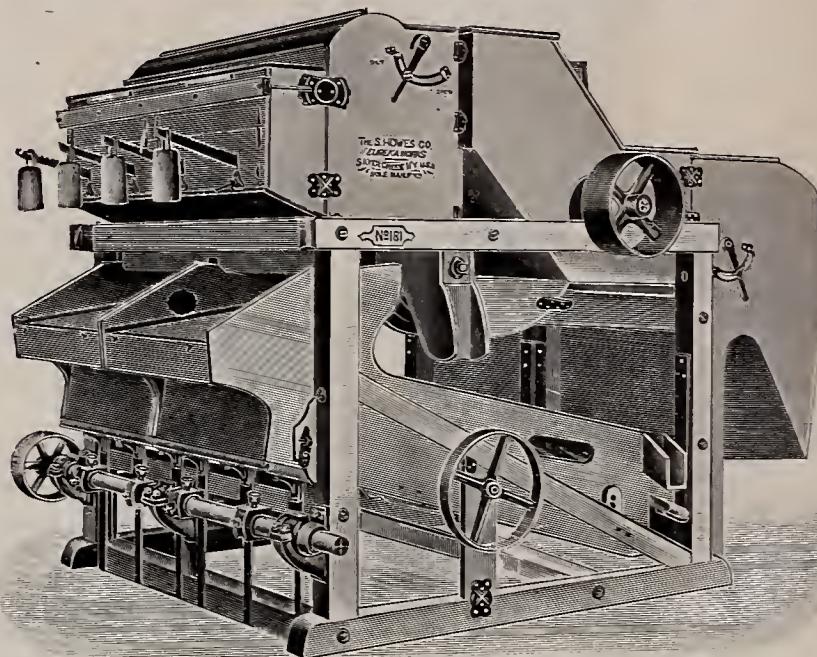
For Sale by MITCHELL BROS. CO., 315 Dearborn St., Chicago, Ill.



THE "Eureka" Counterbalanced Elevator Cleaner



WITH AUTOMATIC SIEVE CLEANERS.
NO VIBRATION. LARGE CAPACITY. CLOSE SEPARATIONS.
SELF-OILING BEARINGS. NO ATTENTION REQUIRED.

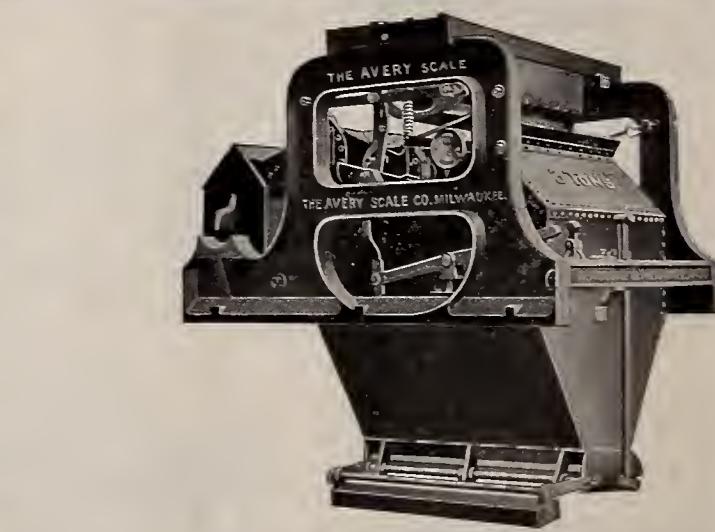


We supply every requirement in the grain cleaner line with the highest grade machines. Correspondence solicited.

THE S. HOWES CO.

"Eureka" Works, SILVER CREEK, N. Y.

Represented by
W. E. SHERER, 412 S. Third St., Minneapolis, Minn.
J. D. MATTESON, 412 S. Third St., Minneapolis, Minn.
J. N. HEATER, Hotel Savoy, Kansas City, Mo.
GEO. J. NOTH, 501-502 Traders' Bldg., Phone Harrison 667, Chicago, Ill.



AVERY Automatic Scales

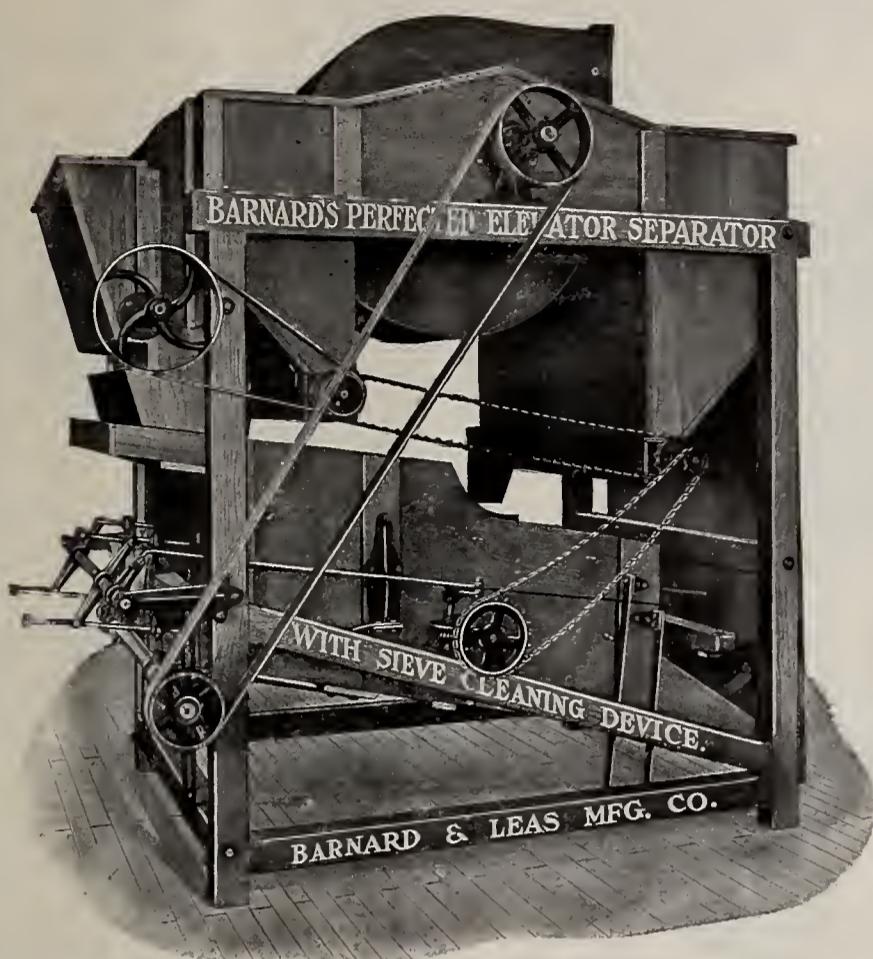
FOR GRAINS AND FLOUR

Gives absolute weighings. Keeps the record for you. Occupies small space in the elevator.

We guarantee results and allow free trial. Write for prices.

AVERY SCALE CO.
North Milwaukee, Wis.

It Works Underneath the Sieves



BARNARD'S PERFECTED WAREHOUSE AND ELEVATOR SEPARATOR
With Sieve Cleaning Device

The Sieve Cleaning Device on Barnard's Perfected Separator works underneath the sieves. Thus it lifts the trash out of the holes and causes it to tail over instead of assisting it to pass through with the grain. This results in keeping the sieves perfectly clean at all times and insures positive and uniform work.

Consequently the Separator is entirely automatic and requires almost no attention.

The Air Separations are also most efficient and under full control of the operator at all times.

We also make:

The Cornwall Corn Cleaner.

The Victor Corn Sheller.

Willford's Light Running Three-Roller Feed Mill.

Barnard's Two and Three Pair High Feed Mills and a complete line of Flour Mill and Elevator Machines and Supplies.

Send for latest Catalogue.

BARNARD & LEAS MFG. CO.

Builders of Elevator Machinery and Supplies

MOLINE, ILL.

WHAT YOU NEED

In Elevator Machinery and Supplies may be had on short notice, at any time, by sending your orders to us. We have the big assortments, our goods are always of the best obtainable quality and our prices as low as consistent with such quality.

We have the finest equipment in the country for doing

Roll Corrugating and Grinding

Try us once and learn what perfect work is like. Write for our Catalog and Prices.

THE STRONG-SCOTT MFG. COMPANY

Formerly Strong & Northway Mfg. Co.

N. W. Agents: Richardson Automatic Scale Co., The Invincible Grain Cleaner Co., Also Process Co., Dufour Bolting Cloth Co., and Knickerbocker Dust Collectors.

MINNEAPOLIS, MINN.

YOUR FANS



WILL CONSUME FIFTY
PER CENT LESS POWER
IF CONNECTED WITH

"THE NEW CYCLONE
1905"

THE KNICKERBOCKER CO.
JACKSON, MICHIGAN

SEE THAT YOUR
CONTRACTS CALL FOR



THE

**CUTLER
STEAM
DRYER**

SOLD BY ALL MILL FURNISHERS

Not an Experiment. In successful use 25 years drying

CORN MEAL AND HOMINY,

BREWERS' GRITS AND MEAL,

BUCKWHEAT, RICE AND

ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE, CLAY AND ORES

Automatic in operation, requiring no attention. Double
the capacity of any other Dryer sold for same price.

THE CUTLER CO., North Wilbraham, Mass.
CATALOG ON REQUEST.



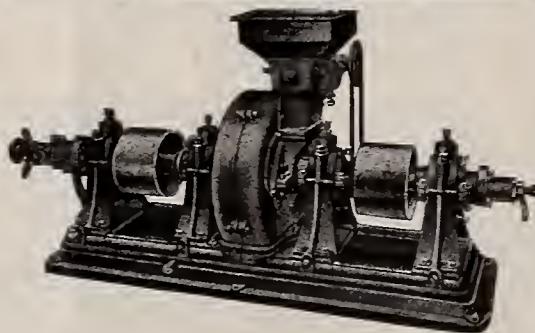


Write for PAMPHLET (free) about "Faultless WEIGHING" to AMERICAN GRAIN METER Co., Springfield, Ohio

BETTER
FEED—
LARGER
PROFITS

Monarch Attrition Mills

are popular with elevator owners and millers because they produce better feed than any other mill, and thus enable their owners to make larger profits. Quality counts in feed grinding just as much as it does in any other business and the man who makes the best feed will naturally make the largest profits. To produce the best feed you must have the best mill—and that is simply another way of saying MONARCH ATTRITION MILL. Remember, we don't ask you to take our word for it. You can have a mill on trial, with the understanding that we pay carrying charges both ways if it fails to make good. No matter what you want to grind, the Monarch is best for the purpose.



OUR CATALOGUE

will tell you why the Monarch has phosphor-bronze interchangeable bearings; cable-chain oilers; double movable base; safety spring; quick release; relief spring; special adjustable endless belt drives; hammered steel shafting; ball bearings and other improvements not found in competing mills. This catalogue is free; write for it.

Mention amount and kind of power you expect to use for operating a mill

SPROUT, WALDRON & CO.

Northwestern Branch:
7 Corn Exchange, MINNEAPOLIS, MINN.
John Williams Taylor, Southwestern Agent,
491 Pacific Ave., DALLAS, TEXAS

Box 320, Muncy, Pa.

Choke - downs, Long Delays, Losses Eliminated
With the use of the

Anti-Choke-Alarm or Alarm Machine

Every grain elevator owner knows that if elevator legs would not choke down the operating expenses would be materially cheapened and the working capacity of the plant increased.

Watching legs takes some of the time of employees.

Interruptions from other work to inspect them at frequent intervals take some of their time.

Digging out boots and starting choked legs takes some of their time as well as that of the plant.

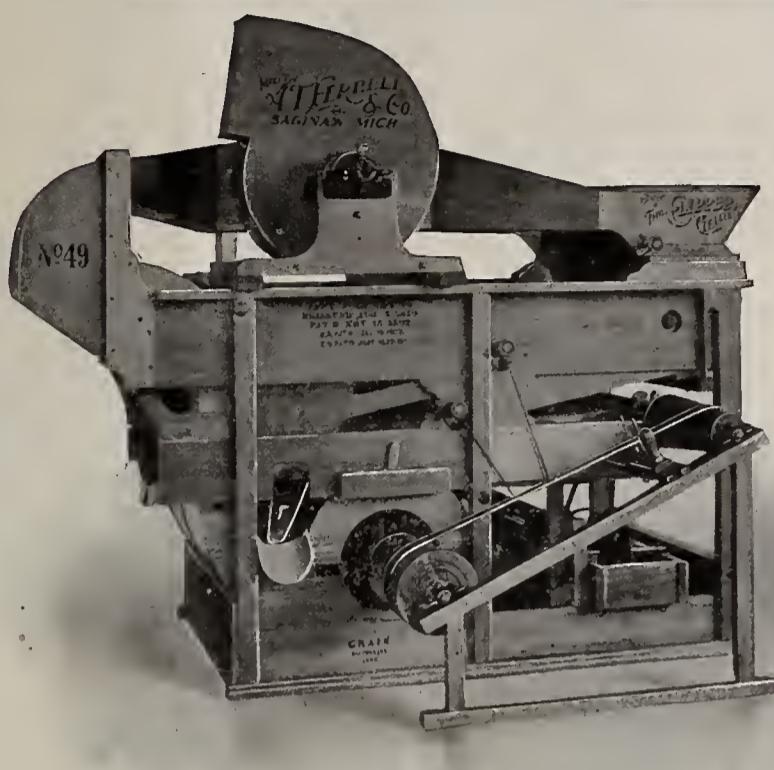
Replacing smashed cups and burnt and mutilated belts takes some of the time of employees and plant, as well as the cash of owners.

Often a choked leg creates a fire in the head which takes the entire elevator.

The Anti-Choke-Alarm Machine regulates and controls the treacherous Elevator leg, thus doing away with watching it as well as all expense incident to choking.

The Anti-Choke-Alarm Machine Attached to a 40-inch Leg.
MACHINES SOLD ON APPROVAL OR SENT ON THIRTY DAYS' FREE TRIAL.
CENTRAL MACHINE WORKS CO.
MINNEAPOLIS, MINN.

The "Clipper" Cleaners with Traveling Brushes



Our traveling Brush device is the simplest, strongest and best made. Strong fibre brushes are made to travel back and forth across the under side of the screens, thoroughly brushing them and freeing the perforations from any grain or seed with which they may become clogged, making it impossible for the meshes to fill up.

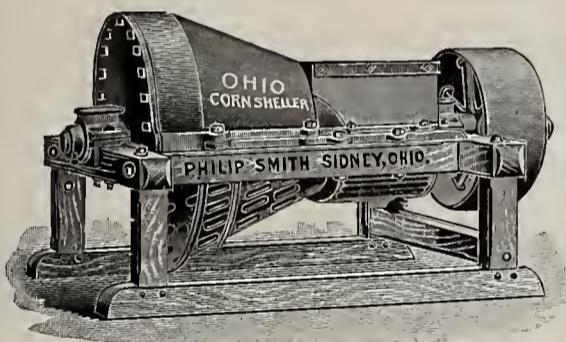
Any man who has used a Cleaner or Separator knows that the meshes or perforations in the lower screen soon become clogged so that it is necessary to "scrape" or "pound" the screen in order to clear the perforations. Our Traveling Brushes keep the screens clear all the time, and make the capacity and work of the machine uniform.

With a machine not equipped with the Traveling Brushes it is often necessary to keep one man in constant attendance when cleaning a dirty run of stock, to keep the screens clear and insure satisfactory work.

The advantages of using one of our machines equipped with Traveling Brushes is apparent: The quality of the work is improved; the capacity of the machine is increased; the cost of operation is reduced, and one has the satisfaction of knowing that he has the best that money can buy.

Catalogue with prices and full description upon application.

A. T. FERRELL & CO., Saginaw, Michigan



Corn Shellers

Corn Cleaners

Drags, Dumps, Etc.

When you want any machinery or supplies for your elevator, write us for prices :: :: ::

THE PHILIP SMITH CO.
SIDNEY, OHIO

THE WEST LEADS IN EVERYTHING

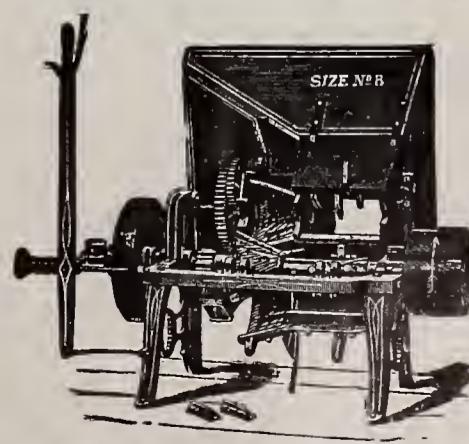
Western people are continually working to make things "just a little bit better." They hustle day in and day out, keeping their business methods strictly up to date. That's why they keep ahead.

For more than thirty years it has been our policy to build and equip grain elevators, "a whole lot better" than the other fellow, and we have done it. That's why we have so many satisfied patrons. Are you one? If not, get in line to-day by sending us your specifications.

GREAT WESTERN MFG. CO.
LEAVENWORTH, KANSAS

Bowsher's All-Around Feed Mill

(Sold with or without sack elevator)



Drive pulley everhung. Belt to it from any direction. Makes complete independent outfit.

THE N. P. BOWSHER CO., South Bend, Ind.

It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. QUIT THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

SEVEN SIZES: 2 to 25 H. P.

Circular sent for the asking.

THE MONITOR

Combined Corn and Grain Cleaner
IS THE BEST MACHINE OF ITS CLASS ON THE MARKET

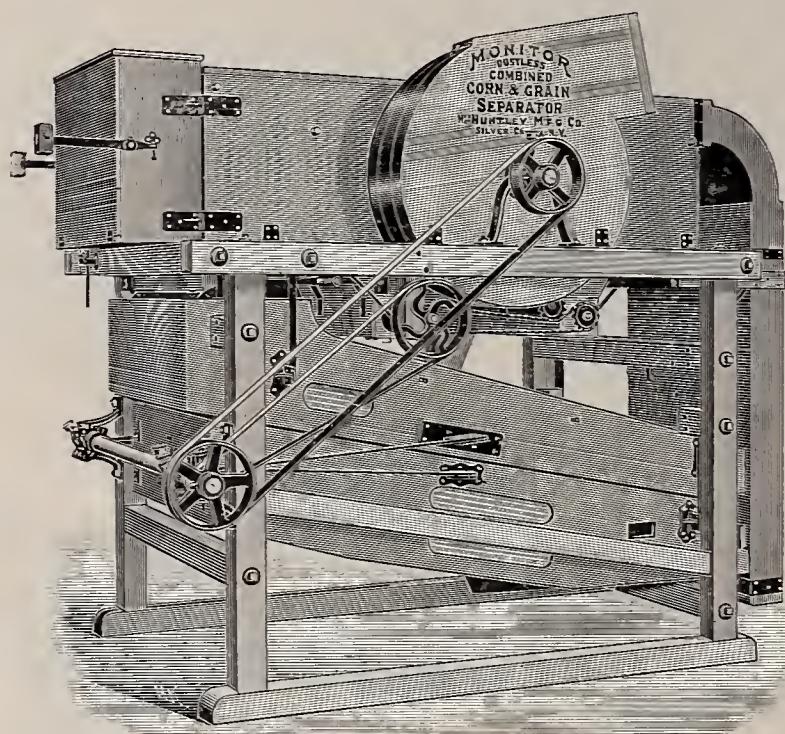
And any user who has compared its work with other makes for similar uses will unhesitatingly indorse our statement

Read This Letter

Winchester, Ind., U. S. A.,
January 23, 1907.

Huntley Mfg. Co., Silver Creek, N. Y.
Gentlemen:—Beg to inform you that we have started the Special Corn and Grain Separator, which you built for our Chesterfield house, and assure you that it is everything that you claim for it. We are now operating five of your separators, and every one of them is giving the very best satisfaction, but we think the last one has some advantages over the others. We have had very little trouble with corn grading this fall, and believe it is due to the fact that where our houses are not equipped with your separator we have been running our corn to Winchester and cleaning it over your machine here. We certainly recommend these separators to anyone who wishes a combined cleaning machine.

Very truly yours,
GOODRICH BROS. HAY & GRAIN CO.



Read This Letter

CHARLES E. GROCE, Grain Dealer.
Circleville, O.,
January 26, 1907.

Huntley Mfg. Co., Silver Creek, N. Y.

Gentlemen:—After considerable inquiry last spring from different grain dealers about a combined wheat and corn cleaner, I bought one of your No. 7 machines. It did splendid work on wheat last summer, and we are more than pleased with it on corn.

I can cheerfully recommend it to anyone wanting a separator for either wheat or corn. Yours very truly,

CHARLES E. GROCE.

The Monitor Combined Corn and Grain Cleaner is built in six sizes with capacities ranging from 400 to 1,800 bushels per hour.

The machine has the double shoe or compound shake movement, which is conceded to be the best method of operating a machine of this type, and as there is little vibration to the machine it can be set in any part of your building, even on the top floor, without bracing, and will not shake or jar the building.

In addition to the compound shake it is equipped with double fans and has all the air separations of our regular separators.

Write today for special folder of this machine as well as our entire line embracing

OAT CLIPPERS, both all steel and wood construction
SEPARATORS, both all steel and wood construction
SCOURERS **MALT CLEANERS**
SEED CLEANERS **FLAX SEPARATORS**

Huntley Mfg. Co., Silver Creek, N. Y.

BRANCH OFFICES

302 Traders Building, Chicago, Ill., F. M. Smith, Agent

316-318 Fourth Avenue South, Minneapolis, Minn., A. F. Shuler, Agent

121 Front Street, New York, N. Y., W. K. Miller, Agent

10 Board of Trade, Kansas City, Mo., H. C. Draver, Southwestern Agent

Mississippi and 17th Streets, San Francisco, Cal.,

Berger, Carter Co., Pacific Coast Agents

A. S. Garman, General Agent, Akron, Ohio

S. J. McTiernan, St. Louis Agent, Terminal Hotel



THE AMERICAN ELEVATOR AND GRAIN TRADE.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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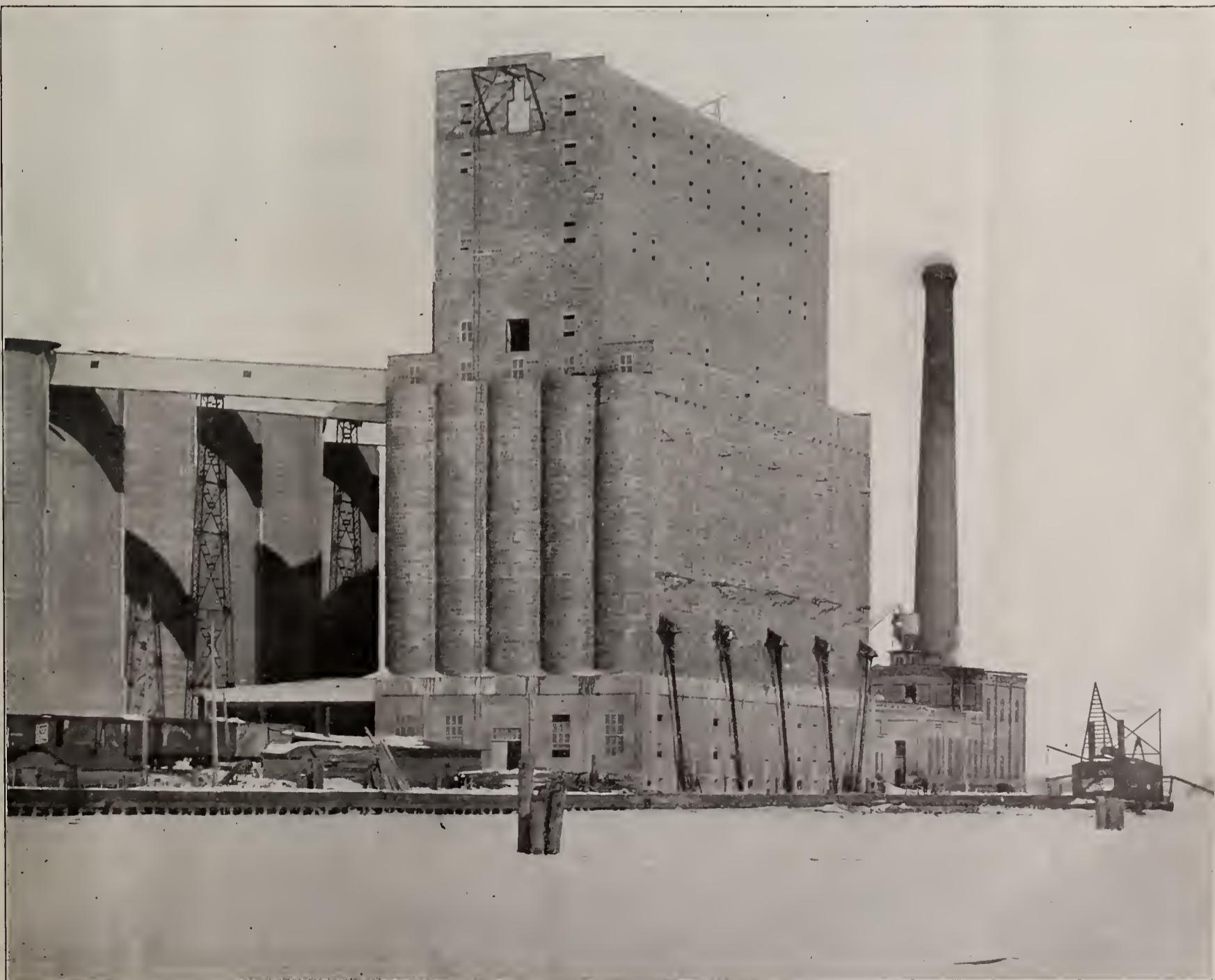
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PEAVEY DULUTH TERMINAL.

The large Peavey (Globe) Elevator at Duluth, Minn., which was burned last year, has been re-

placed by the fireproof structure, shown in the picture, which was completed in February last. It rests on the old foundation, and has dimensions of 71x196 feet; track shed, 48x196 feet; and a

height of 170 feet. The foundations and first story are of reinforced concrete, making it the second elevator of this style built in this country. The house contains in all 122 bins, and has capacity



THE REBUILT GLOBE ELEVATOR (P.V. SYSTEM), AT DULUTH, MINNESOTA.
Barnett & Record Company, Architects and Builders, Minneapolis.

of 665,000 bushels. The bin walls are constructed of fireproof block tiles, which are reinforced with steel bands. The cupola, which is a steel structure covered with two thicknesses of fireproof tile, has floors and roof of book tiles. The floors of the elevator have cement finish throughout and all windows have metal frames, besides being glazed with one-fourth-inch wire glass. The doors are of pressed metal panel style, while steel rolling doors are used for the car shed. This shed has a book-tile roof, as has the elevator.

The machinery equipment is very complete, consisting of four 2,000-bushel Fairbanks Hopper Scales and seven 1,600-bushel scales. Over the scales are garners with capacities equivalent in all cases. There are twelve Monitor Separators on the first floor, six double sets of Monitor Flax Mills in the cupola, and one screenings separator.

The five marine loading spouts have a capacity of 60,000 bushels per hour, and there are also four loading spouts to cars.

Grain is received from cars on three tracks, with four receiving pits to each track, from which conveyor belts lead to the receiving elevators. A special feature is that all the elevator leg casings and spoutings are of sheet steel, as are also the receiving and scale hoppers. The grain cleaners are of steel construction; and an almost absolutely fireproof elevator is the result.

There are electric lights throughout and sliding poles for descending from the cupola.

The architects and builders of the elevator were the Barnett & Record Co. of Minneapolis, Minn.

STILL HARPING ON SUPERIOR.

The Wisconsin Railroad Commission a few days ago again thrashed over the old complaint of some North Dakota farmers and the Superior bucket-shop, misnamed Board of Trade, the most important witness being W. C. MacFadden, representing the North Dakota Bankers' Association, who among other things said the North Dakota Bankers' Association would meet at Grand Forks to arrange to raise the necessary capital to build an elevator at Superior, capable of handling the grain "in a fair manner."

The investigation was brought about by the filing of a complaint against the Omaha and Great Northern Railroads before the Railroad Commission, charging the railroads with keeping grain elevators at Superior closed as public warehouses and asking that the Commission order the railroad companies to open the grain elevators as public warehouses to provide terminal facilities for grain shippers of North Dakota and the Northwest. The Commission, after taking testimony, asked that the attorneys for both sides file briefs on or before May 2, upon three stated phases of the matter, as follows:

Whether a railroad company having no terminal facilities could be compelled to furnish such facilities. The Northern Pacific Railroad Company has no terminal facilities at Superior for handling grain.

Whether any railroad company having terminal facilities, which had for a period of years been open to the public as public warehouses and had been closed, could be compelled to again open the warehouses to the public.

Whether, after warehouses which had been open to the public for years and had later been leased to private parties, the latter could be compelled to open the warehouses for use as public warehouses.

Later, at a meeting of a joint committee of the North Dakota Bankers' Association and the North Dakota Branch of the American Society of Equity, at Fargo on April 26, it was decided to build a terminal elevator at Superior "in order to better the grain conditions at Duluth and Minneapolis."

The joint committee will meet in Grand Forks June 25 to prepare a further report to be made at the convention of the American Society of Equity in Devils Lake on June 26. The meeting was "harmonious" but the members believed it advisable to keep some of the facts from the public for a time.

The following were the committee representing the Bankers' Association: W. F. MacFadden, president of the North Dakota Bankers' Association; Senator J. L. Cashell of Grafton, F. W. Cathro of Bottineau and M. F. Murphy of Grand Forks. The Society of Equity was represented by Theodore G. Nelson of Mayville, state organizer of the order; J. W. Scott of Gilby, George N. Smith of Amenia and M. S. Blair of Ojata. The joint committee organized by the election of Mr. Scott as president and W. C. MacFadden as secretary.

ALFRED ANDERSON.

The members of the Buffalo Corn Exchange are congratulating themselves on securing as head of the Exchange's grain inspection and weighing departments to succeed John D. Shanahan, Alfred Anderson, late of Peoria. Mr. Anderson, as many readers of this paper know, has been employed



ALFRED ANDERSON.

as a grain inspector for the Peoria Board of Trade for the past fourteen years, the last five years of which time he was chief inspector; and in resigning his position, the Peoria Board has expressed its reluctance in losing his services and association and tendered Mr. Anderson the highest recommendations as to his ability.

In entering then upon the duties of his office at Buffalo Mr. Anderson brings to his work the wisdom of a long experience; while for its part Buffalo turns over to him a thoroughly equipped inspection and weighing department, which has the further advantage of a recently established moisture testing apparatus for the purpose of determining the percentage of moisture in grain, which will tend toward advancing a more uniform standard of establishing grades, particularly with reference to corn. Mr. Anderson will be supported in his work by an efficient corps of assistants, and enjoys from the outset the goodwill and earnest support of the Buffalo trade; and the grain interests throughout the country may feel assured that the Exchange in making its selection has secured an inspector of broad experience and one who will endeavor to serve the interests of the market and the trade generally.

Mr. Groves, secretary of the Texas Rice Growers' Association, has been busy gathering data as to the condition surrounding the establishment of a chain of elevators throughout the rice-growing district. It is the purpose of the rice farmers to do away with the present expensive method of handling rice in sacks.

REASONS WHY THE UNIFORM GRAIN CONGRESS RULES SHOULD BE ADOPTED BY THE GRAIN EXCHANGES.

BY J. F. COURCIER, Secretary of the Grain Dealers' National Association.

One of the most serious difficulties with which we have been confronted in bringing about the adoption of the recommendations of the Uniform Grades Congress has been the disposition of some exchanges to cling to their old methods and to disregard the fact that if we were to wait until all could be satisfied, the passing of generations would not see the end.

The immortal Lincoln once said: "I do not say that all who would avoid serving in the war are unpatriotic, but I do think every patriot should willingly take his chance under a law made with great care, in order to secure entire fairness. This law was considered, discussed, modified and amended by Congress at great length, and with much labor; and was finally passed by both branches, with a near approach to unanimity. At last, it may not be exactly such as any one man out of Congress, or even in Congress, would have made it. It has been said, and I believe truly, that the Constitution itself is not altogether such as any one of its framers would have preferred. It was the joint work of all, and certainly the better that it was so."

If representatives of the grain trade of the United States and of the world were able to come together in conference and without a dissenting thought or word should unanimously agree upon a code of rules, the rest of the world would, I think, with one accord ascribe to them the powers of a Creator and credit them with having put to route all traditions bearing upon human laws of average. It has not been claimed that, with the adoption of the recommendations of the Uniform Grades Congress, the structure would be complete and that no further deliberations, additions, changes, alterations, or modifications would have to be made. From the beginning, I have held that the work of the Uniform Grades Congress was but the laying of a foundation. From the beginning, I have seen in this proposition to establish uniformity three essential or principal elements, namely: First, uniform phraseology; secondly, uniform standards, and thirdly, uniform application.

Before we can hope to line up standards and application it is necessary to establish uniform phraseology. After the phraseology has been agreed upon, the next step will be to establish uniform standards. When this second element has been instituted in a practical manner we will be in a position to take up the question of application in an intelligent way. The principal cause of the difficulty in analyzing standards and application in the past has been the elasticity of the phraseology. All endeavors in that direction were defeated by a wide variation in the opinion of those in authority as to their respective constructions of indefinite terms. You can see how this objection will be overcome when the phraseology shall have been firmly established on a percentage basis.

It is not our intention to enter into a discussion of the detail merits of the recommendations of the Uniform Grades Congress. I have religiously held that the province of the officers of the Grain Dealers' National Association in the matter of uniform grades is not to anticipate the will of the grain trade with respect to what the rules of grade shall finally be; it being their duty, for the present, at least, to vary neither to the right nor to the left, but to urge upon the various exchanges the expediency of promptly adopting the recommendations of the Uniform Grades Congress **without** reservation. It is generally agreed that unless we adhere to the policy of absolute neutrality, we cannot hope to enjoy the full confidence and support of the different exchanges, all of which have distinct preferences which they would be very glad

to have adopted. It would seem that we are especially justified in taking this position, because of the exceedingly few objections that have been offered to the work of the Uniform Grades Congress.

There may be, and I have no doubt there is, some secret opposition to uniformity; but since, in my judgment, it cannot possibly be based on anything short of a desire to mislead, we do not anticipate defeat from that quarter. Do not misunderstand me; there is a vast difference between opposition to uniformity and opposition to the adoption of the grades of grain recommended by the Uniform Grades Congress. Any individual of any market may not consider these grades to be equitable, and be honest in his opinion; but we can conceive of no honest purpose that would permit opposition to uniformity. The difference of opinion, if such there must be, should be as to what the rules shall be and not as to whether there shall be uniformity in any form.

A great deal has been said upon the question of federal inspection. The proverbial relation of fire to smoke cannot be disregarded in this connection. In the first place, there must be some cause for the almost universal complaint of existing conditions; and, secondly, the grain trade is deceiving itself when it regards too lightly the agitation for so-called Government inspection. I do not think the Government will be disposed to take over inspection of grain, unless the grain trade shall prove its inability to take care of it.

I have read a great deal of the history of the United States, and, in view of the consummate skill with which far greater obstacles have been surmounted, we have an abiding faith in the ability of the American people to apply the principles of equity to the inspection of grain; but, why re-organize this vast force under a new head, so long as the old can prove its capabilities to minister with equity and justice? We believe, that if the organized inspection departments, as they now exist, whether under state or local exchange control, will adopt a system of uniform grades and avail themselves of the moisture testing and other devices, such as have been, and shall be, demonstrated by the United States Department of Agriculture, to be practical, the producer, handler, and consumer of grain can best be served under the present system of supervision. We especially think that the work of establishing laboratories, such as are now in operation at Baltimore, and New Orleans, should be continued until at least every important grain center has been equipped, and the advantages thereof available to all surplus grain states.

As shown by the resolution adopted by the Uniform Grades Congress, it is our honest desire to work in the closest possible harmony with the United States Department of Agriculture to the end that grain inspection may be placed upon a basis that shall be equitable, not only to the producers, grain dealers and consumers of the United States, but also to the foreign buyers who come to our shores for grain.

This brings us to the consideration of the foreign situation, and the action of the European International Committee on American Certificates, the resolutions adopted by a conference held in London on the 8th of November last, composed of delegates representing all the principal grain centers of Europe, and correspondence in relation thereto which will be found in the March issue of the paper on pages 467, 468.

Mr. Patterson's committee met at Antwerp on March the 22d, and on the 28th, Mr. Patterson addressed a letter to me, in which he said, in part:

I am now requested to write you that after full consideration of your suggestion as to time being somewhat short for the various bodies interested to send a thoroughly representative delegation here, it was resolved that time for such a meeting be deferred till a date to be arranged not later than July 1, and I yesterday cabled this to Mr. E. J. Power, of Power, Son & Co., New York, who is at present in New York, and who is a member of our committee. I have no doubt he will communicate with you. While we have done this in order to do all we can to meet our American friends, I would

point out to you that the feeling is strong on this side of the Atlantic that the present state of affairs cannot be longer endured, and if Europe generally is to continue buying on the certificate basis that alterations on lines we suggest are least that can possibly be acceptable.

Further may I point out that while we have read with great interest your pamphlet we think you should not definitely adopt such until your delegation has met our committee, as if you wish us to accept certificates on such rules, we surely should have an opportunity of considering them with you before final adoption.

We recognize with great pleasure your attitude on this certificate question, and as we are evidently all desirous of treating this important subject in a thoroughly friendly as well as business like manner, I feel very hopeful that result of our joint labors will be to put U. S. export grain trade on a much more satisfactory basis. We, of course, understand that after adoption of rules for grading, there will be only one grade for export and domestic trade."

That we have succeeded in attracting the attention and interest of the European International Committee should be a matter of self-gratulation

TROLLEY BRINGS RELIEF.

The accompanying picture of a car of hay in the progress of loading on an electric road, for which we are indebted to Thos. P. Riddle of Fort Wayne, Ind., may suggest a possible relief in the near future to hay and grain shippers who have been heretofore at the mercy of steam roads for car equipment. An order for a car for this particular shipment of hay was originally placed with the L. E. & W. at Sheldon, Ind., early in November; and the order being unfilled after waiting five months, an appeal for transportation equipment was addressed to the Fort Wayne & Wabash Valley Traction Co. with the above result.

This is the first recorded shipment of a car-load of baled hay by trolley, although local traction express trains have been carrying hay, grain and flour in less than carload lots for several months. Traction lines generally are ordering cars of capacity about the same as steam road



TROLLEY FREIGHT CAR LOADING HAY.

to the American trade, and it is to be hoped that future efforts may be devoted to the completion of the work which has been thus far so well advanced. While we have never expressed an opinion as to the reasonableness of the purposes set forth in the resolutions adopted by the European International Committee, believing the working out of the details and the fixing of the policy to be a prerogative of the grain trade, yet, I take the liberty of predicting that our exporters will not be willing to assume all commercial hazards incident to the delivery of grain to foreign points of destination without exacting an additional charge commensurate with the risk.

All things considered, what could be more strikingly apropos to the proposition to institute uniformity in the grading of grain, than Victor Hugo's preface to one of his great works, which reads: "This work is more than opportune; it is imperative. I publish it." Paraphrased, we would have it to read: The institution of uniformity in the grading of grain is more than opportune; it is imperative. We do it.

The first sale at Chicago of wheat not yet formed in the berry, much less harvested, was made on May 2—new No. 2 red winter, at $\frac{1}{2}$ cent above July, for July shipment.

He's a bad tenant; an obstinate, recalcitrant, all-round mean tenant—he is! His lease expired May 1; there is no "pay" in him—has had notice to decamp—vamose—get out; but he refuses to move. Ejectment writs, petitions and cursory remarks have no effect. The agents of the new lessee, Old Sol Ray, have promised to dislodge the offender, but they're slow. Wonder if Teddy—"The Battle Him of the Republic"—wouldn't be willing to tackle this saucy laggard—Mr. John Frost!—Pope & Eckhardt Co., May 3.

cars; and it looks as if it were merely a question of time until the electric lines shall become prominent factors in the transportation world.

This shipment of hay was made by Thos. P. Riddle of Fort Wayne, Ind., to Cooper & Oddy of Indianapolis. The car was loaded at Sheldon, Ind., on the afternoon of April 5, and was delivered at Indianapolis, a distance of 140 miles, at 2 p. m. the following day. The car contained 189 bales, with an aggregate weight of 24,205 pounds.

FLASH IN THE PAN.

On April 26 suit was begun at Kansas City by Goffe & Carkener against the Santa Fe R. R. Co., which had refused to deliver to the Missouri Pacific Railroad several cars of grain which were held in the yards of the former road.

The apparent object of the suit was to establish the right of shippers to have cars loaded with goods of which they are the owners, or in which they are interested, disposed of in compliance with their orders. It has been the custom of the railroads the past two years to decline to deliver cars to certain other roads, giving as an excuse that they were short of cars and that the other roads mentioned are in the habit of refusing to return the cars when unloaded or exchanging empties for loaded cars. It was hoped that in case a decision favorable to the complainant in this instance should be rendered it would be possible for shippers to completely overturn this practice on the part of the railroads.

On April 30 arguments were begun in the case; but on May 2 the case was suddenly dismissed, the attorney for Goffe & Carkener explaining that his clients did not feel disposed to push the suit without the co-operation of other grain dealers who would share the benefit of a favorable court

decision. Goffe & Carkener also secured a release of the sale contract made to their customer on the Missouri Pacific for the five cars of grain and sold the grain to a concern on the Santa Fe tracks.

OBJECTION TO CERTIFICATES FINAL.

On March 22 last, the International Committee appointed by the International Conference, held on Nov. 8, 1906, at the London Corn Trade Association's offices, London, E. C., held a special meeting in Antwerp, in the Chambre Arbitrale. This committee consists of fourteen members, and a fair attendance was anticipated. Mr. R. A. Patterson, president of the London Corn Trade Association, who is ex-officio chairman of this committee, was in the chair.

The meeting was to consider the several communications which have been received from America in reply to the letters sent out to American boards of trade and all recognized certificate-issuing bodies in that country.

It will be remembered that at the Conference in question, a resolution, proposed by Lieut.-Col. Montgomery, and seconded by Herr Friedeberg of Hamburg, was carried in these words:

That this Conference, representing the most important grain centers in Europe, desires to record its opinion that the present system of certifying grain in America for export is unsatisfactory, and pledges itself to use every effort to obtain such alterations in the present method as will secure proper protection for European buyers.

A second resolution, passed at the instance of Messrs. W. P. Wood and John Procter, bound European buyers to require of all bodies issuing certificates in either America or Canada particulars respecting the appointment and remuneration of inspectors. A third resolution, passed at the instance of Messrs. A. E. Humphries and J. Th. Cramer (Ryswyck), denounced the finality of certificates in so far as they related to the export trade.

The International Committee, to consist of seven United Kingdom and seven Continental members was appointed at the joint instance of Messrs. Humphries and Neill. The committee was thus given what Liverpool "Milling" calls "the rather large order of reforming the present certificate final if its finality could not be altogether removed," which latter was adopted as a desirable end if practicable. "It is not surprising," continues Milling, "to hear that the responses from the other side of the Atlantic to the overtures of the committee are of a decidedly non-committal order." But such as they were they were considered at Antwerp, and the decisions of the committee is embodied in the following note by Mr. Robert A. Patterson to Mr. John F. Courcier, secretary of the Grain Dealers' National Association:

I am much obliged by your friendly letters of the first of February addressed to London Corn Trade Association, and of the 25th February to the chairman of the European International Committee, to which I could not reply before, as I had to submit them to my committee which only met at Antwerp on the 22nd inst.

I am now requested to write you that after full consideration of your suggestion as to the time being somewhat short for the various bodies interested to send a thoroughly representative delegation here, it was resolved that time for such a meeting be deferred till a date to be arranged not later than July 1st; and I yesterday cabled this to Mr. E. J. Power of Power, Son & Co., New York, who is at present in New York, and who is a member of our committee. I have no doubt he will communicate with you. While we have done this in order to do all we can to meet our American friends, I would point out to you that the feeling is strong on this side of the Atlantic that the present state of affairs cannot be longer endured; and if Europe generally is to continue buying on the certificate basis that alterations on lines we suggest are the least that can possibly be acceptable.

Further, may I point out that while we have read with great interest your pamphlet, we think you should not definitely adopt such until your delegation has met our committee; as if you wish us to accept certificates on such rules, we surely

should have an opportunity of considering them with you before final adoption.

I do not propose now to enter into details, but my committee suggest that on two points at least there might with advantage be amendments, viz., that No. 2 wheat should be sweet, and that no wheat which has been brushed or scoured should be given a grade.

Doubtless there are other points, but I just mention above to show that we think our concurrence might be useful.

We recognize with great pleasure your attitude on this certificate question, and as we are evidently all desirous of treating this important subject in a thoroughly friendly as well as business-like manner, I feel very hopeful that the result of our joint labours will be to put U. S. A. export grain trade on a much more satisfactory basis.

Yours sincerely,
ROBERT A. PATTERSON.

London, March 28, 1907.

P. S.—We, of course, understand that after adoption of rules for grading there will be only one grade for export and domestic trade.

J. J. FITZGERALD.

In opening a campaign to interest the grain dealers and elevator owners of the Southwest in



J. J. FITZGERALD.

the Grain Dealers' N. M. Fire Insurance Company of Indianapolis, the management of that most excellent and successful company has sent to Kansas City, to be Southwestern manager, J. J. Fitzgerald, from the Indianapolis office, a gentleman who has been with the company since its organization in 1902.

Mr. Fitzgerald has been connected with mutual fire insurance companies since 1893, when at fifteen years of age he became a stenographer in the office of the Saginaw Valley Mutual Fire Insurance Co. at Saginaw, Mich., where he was born in January, 1878.

He was connected with this company and with the Saginaw Valley Fire and Marine Insurance Co. until 1902, when he assisted in the organization of the Grain Dealers' Fire Insurance Co.

Although young in years Mr. Fitzgerald is an accomplished insurance man, and will undoubtedly put the Grain Dealers' Fire Insurance Company in the front rank of insurers in the Southwest—a place to which it is justly entitled in those lines whose business it solicits.

Something like "old times" was seen on the Chicago Board of Trade on May 2, when the "rampant bulls" got possession of the market, when wheat was crowded up 3 cents under the boost of bad weather.

The Farmers' Educational and Co-operative Union of America is another farmers' combination engineered by W. W. Wayman of Centralia, Ill., who has been pushing the Union on the Pacific Coast. The plan is to "hold your wheat."

RECONSIGNMENT AT KANSAS CITY.

The Kansas City Board of Trade on April 12 submitted to Commissioner Clark of the Commerce Commission a complaint touching the reconsignment charge of \$2 made at that terminal. The Board of Trade contended that the rate of \$2 a car charged for reconsignment over different railways tends to divert grain elsewhere. This charge, it was alleged, is made without regard to regular switching and weighing charges and is assessed, also, without regard to the time the grain is held here.

F. E. Ransom, a member of the Board, who conducts a chop mill and buys his supplies on the floor of the exchange, testified that he buys fifty or sixty cars of grain a month, on two-thirds of which he is required to pay the reconsignment charge, though the grain is not taken out of the city.

Frank J. Delaney, a member and director of the Board, said that the charge acted as a detriment to the Kansas City grain market, as shippers would rather consign grain to markets where they were certain of not encountering the reconsignment charge.

H. G. Wilson, the manager of the transportation department of the Board, testified that a discrimination was made by railways in Kansas City against grain as compared with some other commodities. He cited coal as an example, saying that unless it was a very recent order, no reconsignment charges are made if coal is brought into the city over one road and delivered to the warehouse over the tracks of another railway. He produced figures prepared by the Board of Trade showing that 59,210 cars of grain and bran were shipped into Kansas City in 1906 and that 51,385 cars of grain and grain products were sent out of Kansas City. Of the total number of cars shipped in, 47,866 were hauled over the tracks of the four defendant railway companies, the Burlington, Rock Island, Missouri Pacific and Santa Fe.

On cross-examination and in the testimony for the defense, it would appear that the Board's case was not very well prepared to make an impression on the Commissioner, who has been a railroad man himself. Among other witnesses was H. M. Hopkins, from Minneapolis, who said there is no reconsignment charge there, but that there is a "run through" charge of \$1 per car; so that, with a "run through" (elevation) charge at Minneapolis and no such charge at Kansas City, the latter market would be better off on the whole.

Geo. S. Carkener, of Goffe & Carkener, said that, as grain is brought to Kansas City on an open order, the consignment charge of \$2 results in the consignment of grain elsewhere. The demurrage charge is \$1 per day. "So that, if you keep a car loaded for ten days before you finally give it its destination, the only charge against you is this \$2 reconsignment charge and the \$1 per day demurrage, and even that does not go into effect till twenty-four hours after 7 o'clock on the morning following the arrival of the car—is that right?" he was asked. The answer was in the affirmative, the witness adding that "very often grain arrives in time for a market that is not good enough to sell it in, for which reason it is held in the cars." This unfavorably impressed the Commissioner, who had something to say about using cars for warehouse purposes while waiting for the market to turn.

Mr. Carkener further testified that the railroads made no charge whatever for elevating grain to get it weighed and for afterward transferring it into cars owned by the railway which was to carry the grain on to its final destination.

When Traffic Manager W. J. Mann, of the J. Rosenbaum Grain Company, Chicago and Kansas City, took the stand, the Commissioner asked: "This reconsignment charge—are you compelled to have your grain inspected and weighed?" "Yes," answered the witness. "How do you ar-

rive at the weights and grade?" "The railroads send the grain through the elevators for us." "Is not that worth something? You have the work done, it costs you nothing now, so you say. But it must cost something. Suppose the railroads refused to do it for you and you had to have it done. What would you expect to have to pay for it?"

It was roughly guessed that it was worth 1½ cents per bushel, or \$7.50 per car. Another witness trimmed this down, but he could get it no lower than \$3 to \$3.25. "Even granting that this \$2 charge is onerous," submitted Attorney Holden of the Burlington, "with this transfer and elevation work amounting to as little as you say it is, even then you are \$1 to \$1.25 ahead on each car handled here."

At this point the Commissioner again became the interrogator. "Suppose," he asked Mann, "you bring two cars in from the same point in Kansas, over the same road, and send them both on to Chicago. One goes through without stopping here. The other is stopped to feel this market, or for other purpose, and the railway is put to the trouble of weighing and elevating the grain. Is any more paid for the car that was put on the Kansas City market than on the one that went through without stopping?" The witness answered that there was not, the reconsignment charge not being enforced there. "As a matter of fact, if it went through our elevator the railway would pay us ½ cent per bushel for elevating the grain."

"If you shipped it out over the Alton," interpolated Traffic Manager Crosby of the Burlington, "they would make your rate ½ cent below what the Burlington is compelled to charge, and there would be discrimination against us, would there not?" The witness had to admit that it would amount to a cut of ½ cent per bushel.

"Then with elevating done for nothing and ½ cent paid for your service, and only \$2 ever charged for reconsigning, you would be doing very well," submitted Attorney Morrow of the Santa Fe.

"And the Alton, I suppose, would have to absorb the \$2 switching charge," added the Commissioner. And Mr. Mann added sharply: "Yes; and if you want to get it all in, there would be what we would make on the clipping and mixing."

Commissioner Clark has a way of going straight at a point. Mr. Sharp, superintendent of the Santa Fe terminals, was on the stand, the interrogator attempting to show by him that, while the railways actually do collect \$2 from the grain shippers, they do work themselves and pay connecting lines for switching that amounts actually to \$13, so that, even granting that the \$2 is an arbitrary, still the shippers are \$11 ahead of the railway companies. But the Board on cross-examination undertook to show that the railways do precisely the same amount of work for other classes of merchandise, for which they do not even get this \$2 reconsignment. A number of attempts were made to get a certain point by the attorney for the grain men, which were parried by the witness, till at last the Commissioner became exasperated; and, knowing what the attorney was driving at, he knew also that the witness knew, but was dodging. Taking the cross-examination out of the hands of the attorney, Commissioner Clark demanded sharply: "Is it not a fact that you have a designated place where you make all these transfer deliveries?" "That's it, exactly," promptly answered the witness. "Then, don't haggle about it," was the order of the Commissioner. "Let us get at the facts in the case." There was no more haggling after that, answers being given direct, even when the legal phraseology used offered the witness a chance to evade.

Superintendent Sharp made a showing to the effect that the switching cost the railways considerably more than the \$2 charged for reconsignment. After spending half an hour telling what work was necessary to get a car of grain from a connection, and what switching charges had

to be paid, in some instances to two or three roads, the witness was interrupted by the Commissioner saying: "You have told here about sealing, and weighing, and inspecting, and resealing. Is it not a fact that even if you did not receive this \$2 reconsignment fee you would have to go through all that?" "I think so," answered the witness. "I thought so," was the rejoinder, whereupon it was elicited from the witness that the inspection and weighing were done by order of the state boards, and consequently were a legal imposition and not a rule or mere requirement of the grain men.

R. EARL COX.

There is one advantage the country-bred boy enjoys over his city-bred fellow—he is not driven ab initio into specializing or nothing. The boy of the country has chance to expand—to feel his way—to acquire more than one craft or insight into more than one line of business, and do this, too, without necessarily becoming a "jack of all trades" if he has the stuff in him that would make him a success in town where opportunity,



R. EARL COX.

or, perhaps, need, for developing more than one talent, does not exist.

This thought is suggested by the short career of R. Earl Cox, of W. D. Cox & Son, of Elsmore, Kansas. Born on a farm located four miles south of Humboldt, Kansas, on April 2, 1882, his father in 1887 moved to a point on the M., K. & T. Ry. and established the present town of Elsmore, embarking in the general merchandise, grain and coal business. The subject of this sketch was broken into the harness of business at the age of eight, when he began clerking in the store mornings and evenings and Saturdays, attending school during the day. At fifteen years of age he graduated from the high school with its highest honors and the following fall he began a business course in Spalding's College, finishing on March 1, 1898, completing the course in three months under the usual time.

During the same month he succeeded Charles Freeberg as partner in the firm of W. D. Cox & Co., the firm being then changed to W. D. Cox & Son. They handled hardware, implements, grain and coal, the junior member taking charge of the grain business. In 1900 the firm discontinued the implement business and added furniture and undertaking, by purchase of a local stock. Being a new line, the junior partner took up the study of embalming, and now holds three diplomas and a state license in this line of work. At time of receiving his state license, he was noted as being the youngest licensed embalmer in the United States.

The firm built a modern grain elevator last fall and are now enjoying a nice and profitable local and transient grain business. Mr. Cox has occupied the president's chair for four terms in the Southeastern Kansas Grain Dealers' Association, and in January last was elected a vice-president of the Kansas Grain Dealers' Association, no doubt being the youngest officer that Association has ever had, being then only twenty-four years of age.

Mr. Cox has not only been active in business, but has always been a leader in the republican party in his town and county. He believes in progression, and is always found doing his part for the upbuilding of the town and community in general. Mr. Cox is quite a student of literature, always finding some time for reading and mind building. He has also devoted much time to music in the past, but the duties of business have caused him to give less time to this accomplishment.

RAILROAD CLAIMS IN IOWA.

In regard to making claims before the Iowa Board of Railroad Commissioners, Secretary Wells addressed the Commissioners to the following effect:

"Under Sections 2134-35-36 of the Code, would it be proper to present to you a claim against a railroad company for damages because of discrimination in furnishing cars; and does not the statute thus provide that the Board of Railroad Commissioners make an investigation and a report of the facts involved in the complaint and to order the railroad company to make settlement of such damages in accordance with the finding of the Commission? Kindly give me your construction of the statutes along these lines."

He received the following reply by Dwight N. Lewis, Secretary:

"It is the opinion of this Commission that it would be perfectly proper for your association to make complaint to the Board of Railroad Commissioners under Sections 2134-35-36 of the Code. We also call your attention to Section 2116, which is the section that defines the duty of a common carrier in this state. This complaint might relate to transportation between towns or individuals, or it might simply relate to the failure of a railroad company to furnish cars for transporting freight, based upon the general duty of a common carrier and upon the section last quoted. The Commissioners have some doubt as to whether the burden of proof lies upon the question of the "power" of a railway company, as mentioned in Section 2116. It is quite likely that the court would say that the burden of proof rested upon the railway company to show that it was beyond its ability to furnish cars. In either event, the Board of Railroad Commissioners would be required to give notice to the railway company and fix the time of hearing and require the railway company to answer the complaint. It would then be the duty of the Commissioners to make an exhaustive investigation of the subject.

"You may be sure that any complaint which you may file with the Commissioners will be promptly attended to. It is suggested that you confer with your attorneys upon the subject of damages sustained by your association on account of the failure of the railroad company, as a common carrier, to transport your freight within a reasonable time after demand is made by you."

Grain handlers at the Canadian Pacific Railroad elevators at Ft. William struck on May 1, with 300 cars of grain arriving daily to be handled. A demand for an increase of 3 cents an hour caused the walkout.

Seattle grain men say that the bulk of the 1906 wheat crop has now passed out of the hands of the growers and is owned at the water terminals. It is now simply a question of getting the wheat to the Sound. Local needs, at least, are now well supplied.

DIRECT HEAT ROTARY DRYER.

The accompanying illustration shows a special dryer manufactured by the C. O. Bartlett & Snow Company of Cleveland, Ohio, for the purpose of drying grain and grain products. It is known as the Style "M" Direct Heat Rotary Cylinder Dryer, and is especially adapted for use in small plants, as well as medium and large ones.

This dryer has an outside cylinder 36 inches in diameter and 16 feet, 20 feet or 25 feet long. To this outside cylinder are fastened iron rings revolving on rolls, or trunnions. There is also an inner cylinder. There are fire front and grate bars.

The fire products pass directly into the inner cylinder, which extends the whole length of the dryer, and out at the stack or fan, whichever is desired. The grain or meal to be dried passes into the space between the inner and outer cylinder. There are inter-elevators fastened to the outside cylinder for continually elevating and cascading the material through the hot currents of air, and also continually dropping it onto the inner hot cylinder. There is also a current of air passing through the grain while it is being dried, taking up the moisture as fast as it is released. The dryer is very simple in construction.

The capacity of the dryer depends upon the amount of firing done. It is reasonable in price and requires very little power to run it. The ob-

houses, transhipping to vessels, delivering to railway wagons, carts, etc., and screening and blowing the grain (if required) in its passage from the vessel being discharged.

No ship's gear or assistance is required from the vessel to be discharged, to ship and unship the elevator, as the entire handling of elevator in putting in and taking out of the vessel is manipulated by the machinery on the elevator barge. In addition to bulk grain ships, provision is made for dealing with bag grain cargoes that can be discharged, weighed in draughts of 3 and 5 bags, skipped into bulk, reweighed and delivered either in sacks or bulk. The floating apparatus can proceed to any vessels in dock or in the river, and perform the various operations required, such as elevating grain, weighing and transhipping to steamers, sailing vessels or barges, and if in dock where railway lines are laid down, deliver to railway wagons, carts, double story shed, warehouse or quay. The various operations can be performed at a very considerable reduction on the present charges, and provision is made on the apparatus to guard against any spillage or loss of grain in carrying out the different operations.

The grain is elevated from the hold of the vessel to be discharged by means of a chain of buckets, which carry it to a receiver, along which it travels and is discharged into a hopper, from which in turn it is raised by a similar process to the top of the elevator, and then conveyed by means of shoots

[For the "American Elevator and Grain Trade."]
**THE NEWS OF THE TRADE IN
TOLEDO.**

BY HOWARD L. SPOHN.

Charles Park, owner of an elevator at Thornville, near Newark, O., suffered \$12,000 loss when his mill was destroyed by fire the middle of April.

On Tuesday, May 9, Raymond P. Lipe, one of the largest and most prominent hay dealers in this section of the country, left New York on board the White Star Liner Celtic for a trip through Europe. He expects to be gone about three months. He is accompanied by his family.

The Raymond P. Lipe Company of Toledo has recently purchased five sections of the M. E. Church sheds at Fayette, Ohio, for the purpose of establishing a permanent branch and warehouse. The sheds will be moved to the Toledo & Western Railroad yards, put on piers, fitted up with floors and sliding doors, and will be under the direction and management of Mr. S. A. Jones, the representative of the Lipe Company in that section.

For a time, at least, the negotiations which were expected to mean a new steel elevator for Toledo have been broken off. The deal, which was reported last month, was between the local owners of the old Union Elevator and some prominent New York capitalists. The price was practically agreed upon, but some unexpected minor details brought the deal to a sudden termination. It is reported here, however, that the project is not necessarily abandoned and that negotiations may be opened again in a short time.

The elevator at Metcalf, Ill., owned by Harry Epps of Delphos, Ohio, was totally destroyed by fire on Thursday night, April 18, entailing a loss of \$45,000. There were 86,000 bushels of corn in storage. Insurance was heavy. It is thought the fire started from a spark from a Clover Leaf locomotive, while there is also a report that it may have been of incendiary origin. William Marquand, who is in charge of the elevator, was recently elected to an office in the village on an unpopular ticket, and it is said that out of revenge the deed may have been done.

Clover seed shows an exceptional activity in the new crop options. Speculations are much more active than usual at this time of the year, and this fact is accounted for largely by the shortness of the crop during the past two seasons and the prospects for a similar condition next year. The weather so far has been decidedly against a large crop and already dealers are worrying about the next year's supply. Since the miserable failure of the foreign shipments to stand grading, the question of what will be done for the shortage is becoming a momentous one. Summing it up the condition at this time is told in four words—bad reports, good buying.

Although there seems to be more hay moving than has been apparent in the 30 days, the prevailing high prices still hold firm. It seems to be the general impression, however, that the top has been reached and that a fall would not be entirely unexpected. The new crop looks very good, and conditions are not exceptionally bad for a big production. Cheaper and lower grades seem to have the call, owing to the extreme high price of top grades, but there is no lack of buying straight through. Carlots of No. 1 timothy are bringing about \$19, with lower grades down in proportion. Clover brings \$15. Wheat and oat straw are quoted at \$7 with rye a shade higher selling freely at \$8 and in some cases as high as \$8.50.

RAILROAD SITUATION.

Grain shippers along the line of the Detroit, Toledo & Ironton Railroad have at last succeeded in making an arrangement whereby they will have better service in the way of box cars for shipment of grain, etc. The D. T. & I. has heretofore refused to allow its box cars to leave its line, and as a result the shippers have been



STYLE "M" DIRECT HEAT ROTARY CYLINDER DRYER.

ject in placing this dryer on the market is to enable the small elevator man or miller to dry all his grain before shipping or storing, thus insuring safety. It is believed that this is a necessity, and something that will be thoroughly appreciated by the grain and milling trade.

A NEW ENGLISH DEVICE.

Any mechanical appliance which will facilitate and cheapen the handling of grain cargoes will be welcomed by those interested in the grain trade, says the Liverpool Courier. It must be admitted that in this direction there is considerable room for improvement, although in connection with the Liverpool docks especially much has been done within recent years to introduce labor-saving appliances in the shape of elevators and transhippers, so as to enable traders to meet the keen competition which has now to be contended with. There was on exhibition on March 28, in the board room at Colonial House, a working model of Brown's patent combination floating grain elevator and transhipper, an invention which has already claimed much attention from those associated with the corn trade of the port. It has been designed by J. T. Brown of Rudgrave Square, Egremont, an employee of the Mersey Docks and Harbor Board, who has been closely connected with the handling of grain cargoes at the Liverpool and Birkenhead Docks for many years. Mr. Brown claims that his invention is a distinct advance on present mechanical appliances and will reduce the cost of handling grain in bulk or in sacks by from 25 to 30 per cent. His object in designing this combined grain elevator and transhipper is the great economy of labor in the several operations that can be performed, in discharging vessels, handling grain, weighing and delivering to ware-

houses, transhipping to vessels, delivering to railway wagons, carts, etc., and screening and blowing the grain (if required) in its passage from the vessel being discharged.

into the warehouse or barge, or, if required, into sacks, which are automatically weighed, counted and landed on a platform ready for transhipping. If the grain has to be screened this is carried out on board the barge, and the dust, a marketable commodity, is collected by means of a cyclone, so that there is no wastage of any kind. One or more discharging plants can be arranged on the same pontoon or barge, and the bulk handling capacity of each may be from 50 to 100 tons per hour. Bulk transit, sacking, discharge, and loading can be carried on with one plant, and with four such elevator pontoons the largest grain cargoes can in a day or little over be transferred simultaneously to either barge, quay, or warehouse in bulk or in sacks, as required. The model, which was shown by Mr. Brown, was inspected by various members of the Dock Board, and other gentlemen connected with the grain and milling trades, who were greatly impressed with the utility of the invention and the ingenuity of its designer.

Where is the oat crop raised? Speculator asks how many oats do Texas and Oklahoma raise? Last year they raised 43,000,000 bushels, against 38,000,000 two years ago. They raise only a little more than they did ten years ago. Iowa and Illinois are the big states. They had 249,000,000 in 1906, against 265,000,000 in 1905, or over a quarter of the total crop. They are the only states to raise over a hundred millions. Northwest has increased its oat production. Wisconsin raises nearly a hundred millions. Minnesota and Nebraska each raise seventy-odd millions. Indiana, Ohio, Michigan, North and South Dakota and New York each average forty-odd millions. 1906 total crop was 964,000,000 bushels. Largest was 987,000,000 in 1902.—King & Co., Toledo.

greatly handicapped in their shipments to other markets. At a conference between the railroad officials and state officials at Columbus, Frank Durbin, general counsel for the D. T. & I., agreed that the road would allow one-half its box cars to be used for grain shipments, all such cars to be permitted to leave the line. Should the railroad fail to keep this agreement, the attorney-general will be requested to bring suit and compel the road to live up to its charter granted by the state, as a common carrier.

Another important point to shippers was the decision last month of the Ohio State Railroad Commission in regard to the complaints against the car service rules. By the ruling of the Commission the old 48-hour ruling on cars of 60,000 pounds or less holds, but on cars of greater capacity 72 hours are given for the unloading. Weather conditions also shall enter into the question of unloading, and when it is such as to prevent work on the cars the time is not to be charged against the receiver. Holidays and Sundays are also to be taken into consideration. The receivers will be given credit also on consignments, up to seven days, for time saved in unloading; that is, if a car on which the law gives two days to unload be unloaded in one day the other day can be used to apply on a delay on another car. The rulings were all very beneficial to the shippers and they are correspondingly pleased.

Because of the fact that Chicago shippers are able to move their grain to the seaboard at a less rate than are the members of the Toledo Produce Exchange, a vigorous fight has been started by the Toledo Produce Exchange for a re-adjustment of rate conditions. The railway companies are accused of discriminating in favor of Chicago shippers, in that while the freight rates in the states of Ohio, Indiana and Michigan have been advanced to a basis of 19½ cents on the hundred, the Chicago shippers still have the advantage of the old rate of 15 cents, thus making it cheaper to ship grain from Chicago to the seaboard than from any point east of Chicago. The fight has been started by the local Exchange by the sending out of a letter of protest, asking the co-operation of all the grain dealers of the Central Freight Association territory, covering the three states mentioned. Until responses are received to the letter nothing definite will be done by the Produce Exchange. If the grain dealers in the various cities involved will give their support to the movement, the Exchange will begin the fight at once to have a more just rate established. But whatever the outsiders do, it is practically assured that the Toledo grain men will take up the fight and carry it to the finish.

The action is taken as much for the protection of the producer as for the benefit of the Exchange, because the brunt of the discrimination will be borne by the producer in the territory affected, and that he will be forced to receive less for his grain than the extra amount of the freight rate may be met by the shipper.

CAR SHORTAGE INVESTIGATION.

The most interesting development in the local grain and produce situation during the past month was the investigation of the car shortage situation by Special Agent Ralph M. Mackenzie of the Interstate Commerce Commission. Following the investigation there was a general relief; and now the latest development is the report that as a result of his investigation the federal grand jury which sits in June will do a little probing into the facts in the case.

It seems that the Produce Exchange secured some evidence that Mansfield, Pittsburg and other points were being handled better, so far as cars are concerned, than the local market. When the facts were secured, the matter was taken up by the Exchange, with the result that the following message was sent out on April 12 to the Commission, to President Newman of the New York Central, and to President McCrea of the Pennsylvania:

Toledo industries have been paralyzed beyond description during the past 90 days by railroads

neglecting to provide sufficient facilities for moving freight. We, as a representative body, voice the sentiment of the entire community.

And we have evidence that competing markets are being and have been much better supplied with cars, as they are offering grain for immediate shipment. Grain and grain products have been filed for shipment here for over two months, and no relief in sight.

We earnestly protest against such discrimination and respectfully request those in authority to immediately take steps to give Toledo shippers their due proportion of cars.

In reply the New York Central transmitted the following:

Extremely short of equipment at every point on our line, but are endeavoring to distribute available equipment absolutely without discrimination. Will make special effort to relieve the situation at Toledo.

On April 17, in reply to another telegram from the Toledo Produce Exchange, Mr. Brown of the New York Central wired:

I am advised by the Lake Shore people that 50 cars were furnished Toledo shippers on Monday and Tuesday, and that 50 more are now en route to be distributed among your shippers. We are furnishing you more than your proportion of the total number of cars available, and submission of all facts to the Interstate Commerce Commission

AN OHIO PLANT.

The premises at Agosta, O., owned and operated by C. O. Barnthouse, successor to C. F. & C. O. Barnthouse, was originally built for a flour mill, as its appearance indicates, and was operated as a mill. In 1903, however, it was dismantled and converted into a grain elevator, with 28,000 bushels' capacity. The present equipment includes a 25-horsepower Fairbanks-Morse Gasoline Engine, Eureka Separator, Clipper and Seed Cleaner, Ohio Corn Cleaner, U. S. Sheller, Monarch Burr Feed Mill, Standard Track Scales, American Gravimeter, Fairbanks Wagon Scale, overhead corn dump.

The building is a heavy frame construction and is ceiled inside. The bins are all hoppered. Cars are loaded by gravity from the elevator head. The elevator has one stand with 6x11 buckets and two stands with 5x9 buckets.

Mr. Barnthouse deals in seeds, salt, coal, flour, etc., as well as grain, and does a nice, comfortable business.

GATES & CO. QUIT.

The famous house of C. G. Gates & Co. of



ELEVATOR OF C. O. BARNTHOUSE, AGOSTA, OHIO.

would undoubtedly result in an order from them reducing your car supply.

The Pennsylvania wired in return that they were furnishing all the cars they could get and that Toledo was no worse off than any other city. They attributed their difficulty to the fact that they were unable to get their cars back from other lines.

The Interstate Commerce Commission, however, did not waste any time, but immediately sent on Mr. Mackenzie. He arrived on Monday, April 15, and on the following Friday the situation commenced to clear up materially and cars were regular arrivals. He continued his work in secret for a week, and then, after announcing that he had made an examination, he remained over still another week before he went to Washington.

Shortly after he returned to Washington District Attorney Sullivan came over from Cleveland, and the information leaked out that he was doing a little missionary work which would bring the grand jury and the railroads into communion in June. Mr. Sullivan refused to go into any discussion of his work, simply stating that he was looking after "routine." It is known, however, that he will surely get after some of the roads on complaints from small coal shippers; and it is altogether likely that Mr. Mackenzie's report will figure materially in the developments in the case.

But, in so far as the grain and feed shippers are concerned, their point has been obtained in a great measure. That is, they have had material relief; and while some of the kinder-hearted shippers are willing to attribute it to natural causes, it is nevertheless strangely significant that the "natural causes" came into effect right after the Commission got busy on the job.

New York and Chicago has quit, or will on June 1, owing, it is said, to the desire of the other ten partners to be relieved of the operations of the Gateses, pere et fils.

The house was more famous latterly for its plunges, or those of Gates pere, in Wall Street; and there was a rumor that during the heavy stock market slump in January the Gates interests had lost heavily; but this story was not borne out by the information obtainable in the loan market, which showed that the firm were smaller borrowers of money than was their usual custom, a fact which indicated on its face a leaning toward the bear side. Those who held the belief that the Gates crowd had been heavy losers went so far as to fix the amount of their losses at \$6,000,000. However, the operations of J. W. Gates and his son and their followers have been of the first magnitude, and it has not been unusual for the house at times to carry over \$100,000,000 of stocks.

SOUTH AUSTRALIAN GOVERNMENT CERTIFICATES.

At the request of a number of grain merchants, the South Australian government last year entered upon a new departure, in connection with the produce depot, by allowing an expert to certify the weight and quality of a dozen shipments of wheat sent across sea; and in every instance, says the official reporter, the experiment turned out very well.

The advantage derived by merchants by reason of this action of the government, says the Australian Miller, was that they were able to sell their wheat and get immediate settlement on production

of the government certificate as to quality. The buyer was quite willing to accept the guarantee of the government without any demur, and the merchant received his check. Some thousands of tons of wheat were represented by these shipments. The merchants who made the arrangement with the government urged that with the official certificates of the state they could find markets for their cereals which would not otherwise be open to them.

The work was done without any cost to government, as the shipper met all the cost of weighing and inspection.

SACK PROBLEM ON THE COAST.

The high price of grain sacks has made the consumers on the Pacific slope very sensitive to manipulations of the market; and intense interest is felt in the management of the state prison factories of Washington and California. In the former state a new law has been enacted, from which, however, Walla Walla farmers anticipate little advantage over past conditions. One of the large wheat growers of that district is quoted as saying:

The result of the law governing the price and distribution of prison grain bags just enacted will probably be that the penitentiary will have their sacks on hand at the end of the season. Farmers up in Spokane and Whitman counties cannot afford to buy pen. sacks at 9 cents with the local freight added and without any assurance that they can secure all they need at the same figure of the Calcutta sack dealers in Portland.

Instead of the penitentiary jute mill acting as a regulator of the price of grain sacks, its usefulness has been destroyed in that capacity, because some of the farmers who were unable to procure prison-made sacks at the reduced price could not see that because of the penitentiary product they were getting their products at a much lower figure than they otherwise would.

This gentleman believes that a mistake was made in the state attempting to make a profit on the grain bags manufactured at the penitentiary, which, in view of the present high price of jute, brings the price close to that asked for the Calcuttas.

The Washington State Board of Control for the penitentiary had fixed the price of grain sacks for the coming season at 9 cents, and announced the following allotment of bags for 1907: Asotin County, credited with 600,000 bushels, will get 13,240 sacks; Franklin, 2,000,000 bushels, 44,150 sacks; Lincoln, 5,000,000 bushels, 110,000 sacks; Walla Walla, 3,000,000 bushels, 66,240 sacks; Adams, 5,000,000 bushels, 110,400 sacks; Garfield, 2,000,000 bushels, 44,160 sacks; Spokane, 2,000,000 bushels, 44,160 sacks; Columbia, 3,000,000 bushels, 66,240 sacks; Benton, 2,000,000 bushels, 44,160 sacks; Whitman, 5,500,000 bushels, 121,440 sacks. It will be seen by this allotment that there is a pretty general distribution of the bags instead of concentrating them in the Walla Walla district, as in the past.

It appears that a few years ago, when the penitentiary grain bags were first put on the market, there was no demand for them, and the farmers would not buy them at any price. It was then that a few of the large wheat producers in the Walla Walla Valley came to the front and agreed to take the entire output of the penitentiary at the price fixed by the state board of control. When farmers in other districts began to take an interest in the "pen." bags, Walla Walla had practically absorbed them all. Then came a demand that there must be some sort of apportionment among applicants so that a more equitable distribution among consumers could be made, but after one year's trial that system was abandoned and the one embodied in the new law was adopted, by which the sale of bags is apportioned among the counties according to crop estimates made by the state grain commissioner. The prison product is only about one-fifth the total consumption.

In California, also, a few years ago, it was a difficult matter to sell pen. bags for which now farmers are scrambling, and on the distribution of which to consumers they charge bad faith on

the part of the penitentiary commissioners. By the middle of April there had been about 1,600 applications for bags filed, of which 443 were for upward of 5,000 bags each, and the rest for 200 bags and upward. This season the special complaint is the sale by the Board to the So. Pacific Milling Co. of a very large number of bags.

But at best the pen. makes only a small portion of the whole number of bags needed; and at a meeting of the Inland Empire Wheat Raisers' Association at Pendleton, in April, it was voted to accept the bid of a Portland firm for supplying 250,000 bags. The price, while not officially made public, is understood to have been 9½ cents, with a condition that it be lowered in the event of a decline. During the meeting sufficient orders for bags were received from farmers to bring the total number up to 268,000. Consequently, it will be necessary for the association to make another purchase in the near future.

NEW ELEVATOR FOR McCRAY, MORRISON & CO.

The frame iron-clad elevator shown in the accompanying picture was designed for McCray.

COBURN ON CROP REPORTING.

In forwarding to the trade on April 29 a report of even date on the condition of winter wheat in Kansas, Secretary Coburn says:

"It should be stated that this is not a report of probabilities of what may happen, or what the situation may be next week or next month, but of conditions as they were in Kansas in the last half of the fourth week in April. It is not an expression of opinion by the secretary of the State Board of Agriculture; it does not deal with conditions past or present in Oklahoma or other outside territory. It is not the wail of some unfortunate and dejected Jones or Brown whose wheat field or neighborhood has suffered mishap; nor on the one hand the weird word-painting of an emissary sent out in a Pullman car by speculators to spy the land through bullseyes and smoked glasses; nor, on the other, of an artificially inspired land broker whose early expiring options prompt his painting the landscape in rose tints, but the sober consensus of what the men on the ground, neither bought nor sold, buying nor selling, see and say.

"Every day statements are published of what may occur and the various disasters that will fol-



McCRAY, MORRISON & CO.'S ELEVATOR AT ADE, IND.

Morrison & Co. of Kentland, Ind., and erected at Ade, Ind., by Fred Friedline, architect and engineer. The house is a substantial cribbed design with monolithic concrete foundations and is covered with galvanized corrugated iron and galvanized iron roofing.

The machinery equipment consists of two stands of elevator legs, each equipped with 14x7 buckets; one Marseilles Combined Sheller and Cleaner and Buffalo Hopper Scale located over bins; one New Era Manlift; rope drive from line shaft to countershaft and chain and sprocket drives with friction clutches to elevator heads. There are two wagon dumps of large capacity, one of them being equipped with a Chief Ear Corn Feeder.

The power house is in a detached building of brick. A brick fire wall divides the large cob and fuel room from the engine and boiler room. The roof and second story of cob house are of galvanized corrugated iron. The engine is a 30-horsepower self-contained, made by the Chandler & Taylor Co. The boiler is a tubular boiler of 40-horsepower capacity. The iron frame wagon scales and office are placed close to the engine room, as shown in photograph.

The elevator has a capacity of 28,000 bushels, and in design and equipment is the model country elevator of Indiana. It is located on the Chicago, Indiana & Southern Railway in the new town of Ade. The entire plant was designed by Fred Friedline, Chicago, and erected on a general contract.

low unless there is a change of weather within a given time, or that if misfortune, reported in the next county, should come and destroy the wheat, the yield would be greatly diminished. All of this when analyzed amounts to no more than a restatement of the accepted fact that unless it rains a long dry spell is probable. Anxiety and actual damage are by no means identical; green lice do not of necessity spell great loss, and April bugs do not avouch a breadless year."

RICE ELEVATOR SCHEME.

C. W. Hoyt of Kansas City, and who has in charge the interests of Chicago capitalists, is negotiating with the Texas Rice Farmers' Association for a chain of rice elevators and warehouses through the Texas rice belt. It is contemplated to sell stock to the extent of \$500,000 for the construction of these buildings, including a large central plant at Houston. An exchange says:

"It is estimated that the crop this year will be 2,000,000 bags. The bags cost about 12 cents, and bags can be done away with when the elevator is installed. Then there is a waste in handling in the bags. It is estimated that the waste and the cost of the bags combined will amount to 25 cents per bag. This amounts to \$500,000 on a crop of 2,000,000 bags."

Navigation opened at Ft. William with every elevator loaded to the roof and the railway yards crowded to the limit.

REPORT ON CHICAGO ELEVATORS.

The special committee on elevators, appointed by Walter Fitch shortly before his term as president of the Chicago Board of Trade expired, and consisting of Jas. H. Milne, chairman, John B. Adams, Geo. R. Nichols, Wm. N. Eckhardt, J. H. Ware, Frank B. Rice and Edwin S. Skillen, on May 7 submitted a report, recommending as follows:

Your committee recommends that the board of directors take the matter up with the railway companies and in conjunction with the legal advice of the attorney of the board, in view of the recent decision of the Interstate Commerce Commission under the Hepburn act of the Peavey case, endeavor to obtain the necessary relief as to storage facilities, if possible, and, in any event, to procure for the Chicago market every facility now and heretofore granted to our competitors by the railway companies, together with whatever facilities they may be required to grant under the Peavey decision in the matter of transfer facilities.

Thereupon the following committee was appointed to carry on the work suggested by the above report: H. N. Sager, chairman; Edward Andrew, J. A. Bunnell, James Bradley and E. B. Boyd. All of the members of the committee are on the board of directors except Mr. Boyd, who is at the head of the transportation department.

The question at issue, the relations of the "elevator interests" to the Board—that is, the public—has been a delicate one for a long time, and every attempt hitherto to modify existing conditions in order to broaden the public's interest has created friction. The committee, then, as the report says, "appreciating the magnitude and delicacy of this question," resolved at the outset to set aside all "personal grievances and private quarrels," and try "to improve the elevator system as it relates to members and to different businesses on the Board of Trade," and, therefore, to proceed solely upon constructive lines, fair and equitable alike to all the interests involved."

The first question was the obligation of the railways, under the Hepburn act, to furnish elevator facilities. The Board's attorney is of opinion that they are not obliged to furnish "such facilities, so far, at least, as storage is concerned," although he "conceded that so far as transfer of grain in transit is concerned, the act probably would require them to furnish facilities."

In accordance with this opinion, the committee, through Traffic Manager Boyd, opened correspondence with the Western roads requesting their consideration of the following proposition:

First: That there shall be operated on each of the grain-receiving roads into Chicago an elevator in which grain may be stored by the public at a nominal charge.

Second: That there shall be operated in connection with public elevators, or separately, facilities for handling of grain, such as cleaning, mixing, clipping, etc., for which a nominal sum shall be charged.

Third: That the control and operation of said elevators shall be by the carrier, or some source other than those engaged in merchandising, trading or dealing in grain.

Fourth: That on all grain received into such elevators for transfer purposes, there shall be paid by each railroad bringing grain into Chicago, to all elevators or industries located thereon—public or private—a fixed allowance for prompt unloading of the grain and release of cars.

The following plan to carry out ideas of Board of Trade was suggested by the committee:

First: That there shall be organized by the railroads bringing grain into Chicago an operating company which shall lease or acquire, on each of said roads, elevator facilities that will be capable of "handling" and storing for public account grain which may arrive via the several roads. Grain for storage in any of the elevators controlled by said operating company not to leave the initial line.

Second: That each railroad bringing grain into Chicago shall pay a specific amount per bushel to any elevator, public or private, located on its tracks for the service of unloading and release of its equipment, and such amount shall compensate

the elevator for the loading of the outbound cars, and the storage of the grain for a period of ten (10) days from date such grain is unloaded therefrom. Orders for disposition of inbound grain to any elevator covered by this section to be given within _____ days of inspection.

Third: That grain purchased on arrival at Chicago ordered to other railways may be delivered free to such other railway as may be designated. No transfer or other allowance to be made by the initial carrier.

Fourth: That all grain ordered out from elevators upon initial line which has received the benefit of transfer allowance shall be subject to a switching charge to connecting lines of an amount which is reasonable, as at present time, plus average cost of transfer; such charge to be all outbound terminal expense forwarding line should absorb. When grain is ordered direct to connecting line for transfer, such transfer allowance to be performed at expense of said connecting line through elevators located thereon, public or private.

And in support of these suggestions Chairman Milne filed a letter with the roads containing among others the following statements:

We are satisfied the plan proposed will very greatly improve the car situation—more so, in fact, than I believe you realize; because, by having such elevator facilities provided for the public, thoroughly divorced from the management of parties engaged in the grain trade, and operated in the same manner in which the Santa Fe Ry. Co. elevator is proposed to be operated and managed, owners of grain would promptly unload their property into such a house, knowing that it was not operated by a competitor, to whom they must pay tribute, and their business operations subjected to the knowledge and supervision of such competitors, to say nothing of the other serious disadvantages the present method carries with it. Your cars would thus be released days, and possibly in some cases weeks, quicker than is the case now. Such a system would entirely avoid, if not render impossible, a situation such as now (Jan. 7) prevails upon the Illinois Central, where an embargo has been placed upon its cars, very detrimental to general business, and which operates practically to create a monopoly in the grain coming in on that road in the hands of the one firm operating the Illinois Central elevators.

Furthermore, on the question of expense, allow me to remind you that the Board of Trade does not ask "something for nothing." We think that the elevators should at least clear their expenses; and to be relieved of the onerous conditions under which we are compelled to do business because of the relations and conditions now existing between the railways and those operating the elevators of the railway companies, we are willing to pay a reasonable price for the work, sufficient to reimburse the railway companies for such expense.

I think I may safely say that our Board has always shown a disposition to be fair and just toward the railways; and we would like to feel that the railways maintain a similar attitude towards us, and are willing to manifest a disposition to protect this city in its natural rights, against the aggressions of other competitive markets.

We seek no undue advantages over competitors, but we do insist upon equitable treatment with any and all of them.

The reply of the roads to these suggestions showed that they had been in prior communication with the elevator men, and their reply was substantially, "See the roads individually." This was done, Traffic Manager Boyd reporting as follows:

The "Burlington" expressed its willingness to make a trial, if they could get an elevator. They did not seem to think there would be much difficulty in that.

The "Milwaukee" said that while they had no elevator of their own, they would be found "in line" when the time came, but they did not want to express themselves definitely. I need not waste time with them; they would be found in front.

The "Alton" told me practically the same thing; they did not care to invest any money, but it would be possible for them to hook up with the Milwaukee and get an elevator acceptable to both.

The "Great Western"—I had a talk with their representative. He concurred in the views in a general way. Stated he would report to the vice-president, who would be down the following week and would let me know. I have received no definite advice yet.

The "Rock Island" has expressed itself at different times as being favorable, but did not care to commit itself because of the decision of the Interstate Commerce Commission. That seems to be the specter confronting the railroads today, as to

what the Commission is going to decide in the Peavey case and as to what attitude they will assume toward railroads owning elevators. They don't want to invest any money until they know the decision of the Commission. That decision has been arrived at and one member of the Commission has been delegated to write it, but they do not indicate one way or the other, but I have been told a decision has been reached.

I had an interview with D. Miller of the "Q," and I understand they were all ready. He said he would try the experiment for a year.

It is apparent the roads do not care to go into the storage business unless compelled to do so; hence the committee made the recommendation above quoted, and await the action of the roads on the requirements of the Hepburn act as influenced by the decision quoted elsewhere in the "Peavey" case, adding, however, the following:

In view of the fact that some of the railways do not own any elevators in Chicago, and that time will be required to obtain them, either by building or lease, and in view of the near approach of July 1, your committee feel that they ought no longer to delay in making their report, and that any further action in this direction will carry greater weight and be more likely of accomplishment through the officers and governing body of the association than through a subordinate committee.

Your committee desire to state that in their opinion the ideal system of grain transfer and storage facilities is that now furnished by the Santa Fe road, through its new elevator on the south branch of the Chicago River, and that the efforts of the Board should be exerted to the utmost to obtain similar facilities from all of the other railroads. When such facilities are provided under any approved management that is not in any way interested in grain, elevators equipped as this one is should be given preference in being declared regular under our rules, and should have the unqualified support of our members in insuring their success.

The committee also communicated with the Commerce Commission, but owing to the then status of the Peavey case no result was accomplished by the companies.

The committee say also in reference to the existing public elevators that when the committee opened negotiations with the present managers and proprietors of regular warehouses with a view of reaching an agreement with them they were informed by the Armour Grain Co., Peavey Grain Co., and Bartlett, Frazier & Carrington, the owners of public elevators, that—

it was their desire and intention to retire permanently from the business of public warehouses; but that unless forced to cancel their would not again apply to the board of directors for their elevators to be made regular warehouses; but that unless forced to cancel their licenses by an adverse decision of the courts in the Schaffer case, now being prosecuted before a master, these licenses would be allowed to run until the close of the present year, when all of those elevators now operated by them as public warehouses of Class "A," would, from and after January 1, 1908, be operated as "private" elevators. By resolution of your committee, its present chairman was requested to wait upon the other managers of public elevators and ascertain if they maintained a similar attitude on this important question. He did so and found that at that time J. Rosenbaum "would not go out of the business of public warehousemen unless legislated out"; that Walter Keith said "his warehouse was for sale and whenever a purchaser was found it was his intention to retire from the business"; so that practically all of them were likely to assume this attitude. And your committee find that they act as a unit in all their responses to our various overtures and have been assured that in all matters of this kind they will act together.

The committee here report a letter from Mr. Marcy, of the Armour Grain Co., giving his reasons why that company decided to retire from the public elevator business, in which, among other things, he says:

I feel that the temper of the Board of Trade members is such that a change in the system of operation of the public elevators in this city is an absolute necessity. Apparently a majority of the members feel that it is detrimental to their interests to have public elevators conducted along the lines that they are now being handled; therefore, I feel that for the good of

the trade as well as the public warehousemen the system should be completely changed. I am of the opinion that practically all of the present public elevator men feel that they are ready to retire from the public elevator business just as quick as the Board of Trade can provide ample facilities in the way of public elevators to handle the Chicago Board of Trade business; but, although the present proprietors feel that they would like to retire from the public warehouse business, they do not desire to do anything in a hasty manner so as to embarrass the situation, but feel quite positive that as soon as possible they should retire from this class of business.

I feel that your committee or the Board of Trade should, just as soon as possible, work out some plan whereby public elevators may be provided and such elevators as are provided be operated entirely by people or concerns who are not interested in any way in the handling of grain.

I will give you a few reasons why I do not think that any of the present warehousemen can continue to operate public warehouses. In the first place, no one can be expected to operate an elevator, either public or private, without making something out of it. At the present rates of storage it is practically impossible for a moderate-sized public elevator to make both ends meet, even in favorable years, unless they can secure a large amount of grain, which is practically impossible even under present system. The proprietor of a public warehouse secures grain wherever he can and sells it to a third party to go to his public elevator, thus allowing him to earn some storage. This practice is now being attacked; and while a number of the warehousemen and their attorneys do not think the system will be found to be against the law, some of the other Board of Trade people seem to think that will be the case. We will take it for granted, for the sake of argument, that the courts should decide that a public warehouseman has no right to sell his grain to another party to go to the warehouseman's own public house for account of the other party. In that case, there would be no possible way for a public warehouseman to get grain for his elevator, except at very rare intervals, and these only at times when there was a corner in a certain month. Between those times no one would have any interest in putting anything into the public elevators, which would make them helpless in taking care of themselves if not allowed to buy any grain or in any manner to influence it into their houses. The grain would not go there naturally for the reason that there are so many concerns operating private elevators. Every bushel of grain which shows itself on the Board of Trade is jumped for by these different private elevators, and this in itself would prevent any receiver or owner of the grain from putting it into the public houses, as the private houses would pay him better than he could obtain by putting it into the public houses. In addition to that all of the other competing markets are bidding and straining every point in order to obtain the grain; therefore, anyone can easily see how impossible it is for a public warehouseman to obtain any grain unless he can in some manner influence it.

One reason why I feel quite positive that the present operators cannot continue to operate public warehouses is that there is quite an interest on the Board which feels that the elevator men should at all times and under all circumstances guarantee the integrity of the grain in their warehouses. This is something which no sane warehouseman could afford to do. Grain is a peculiar article. It will very often get out of condition in spite of the very best care and attention; and in such cases the warehouseman would have the privilege of posting the grain and the holder of the receipts standing the loss.

Another point is the difference between the in and the out inspection. As you are aware, there are a large number of inspectors inspecting the grain on track. The grade which is put on the grain by these inspectors is the grade which is used when the grain is unloaded into the elevator and the receipts issued. There are three supervising inspectors who at times overrule the inspectors. In addition to this, there is the appeal committee of three members. These different inspectors are changed and the appeal committee is changed from time to time; and in addition to that, all this inspection is done largely by opinion, or sense of judgment, according to the individual inspector, the supervising inspector or the appeal committee's opinion as to what constitutes the grade or what does not. This grain is inspected and put into the elevator by one set of inspectors or supervising inspectors. Later on—several months, perhaps—when the grain is shipped out, possibly the ap-

peal committee has been changed, or the inspectors have been changed; and, if they see fit, they can refuse the grain, which originally went in for a certain grade.

Some members of the Board seem to feel that the elevator men must assume all the responsibility. This they cannot afford to do; and the time might come some day when a very serious state of affairs might be brought about by having a large amount of a certain kind of grain in store and some party manipulating the market call for the grain and the appeal committee refuse to take it, and the party owning the receipts making a demand on the elevator company to provide grain which the appeal committee would take, which would be impossible on account of it being unavailable, and immense losses might be assessed against the proprietor of the elevator on account of the inspection department changing its ideas on the grade between the time the grain went into the elevator and the time of shipment. Having this in mind, about a year and a half ago the public warehousemen wrote a letter to the board of directors and the public in general and advertised it in the newspapers in effect that they would not be responsible for any grain getting out of condition or for any change in opinion of the inspection department; and I feel that the board will not be satisfied with any arrangement except that the elevators guarantee this grain, and that, of course, they cannot do.

Apropos the Marcy letter the committee have the following to say, among other things:

The objection urged in the matter of the inequality of "in" and "out" inspection and the risks thereby involved, we think is well taken; but if the recommendations of your committee in their two preliminary reports of December 21, 1906, and January 7, 1907, are faithfully and persistently carried out, this objection will largely disappear, except in isolated cases. In that connection, however, it is proper to state that the cause of this inequality of "in" and "out" inspection probably is traceable to the fact that, as stated by Mr. James Patten from the rostrum at one of the public meetings in the visitors' room, to-wit: "Ninety-eight per cent of the contract grain put into public elevators is put there by the warehousemen themselves," and as also stated from the same rostrum at that same meeting by Mr. Stream, representing Shaffer & Co.'s elevators, that they make the grain no higher than is necessary to pass into the grade. Natural deterioration, therefore, is probably more than anything else responsible for this difference of opinion between the inspector who inspects the grain "into" the elevator and of the one who inspects it "out," the margin between the quality of the grain itself and the minimum requirements of the grade given it being so slight as to leave no room for deterioration or for reasonable difference of opinion between inspectors. This is less likely to be the case in the future under the proposed new order of things, especially if one of the conditions proposed by your committee and agreed to by the elevator people is faithfully and intelligently carried out, viz.: that "all grain going into and coming out of regular" warehouses shall be under the supervision of competent grain samplers appointed by the Board of Trade, under the direction of the grain committee, and working in conjunction with the state Grain Inspection Department.

In justice to warehousemen of Class "A," however, your committee are of the opinion that any grain passed into their warehouses as fully entitled to a given grade, unless it shall have been out of condition or from some other cause shall have materially deteriorated, should be inspected out as of a similar grade, and in no case should a mere technicality be permitted to condemn the property to a lower grade, since such grain can not lawfully be posted, unless it is "out of condition" to an extent that it cannot be maintained at its original grade by the warehousemen. On the other hand, grain mixed and graded down to a line just sufficient to pass it into a given grade and put there by the warehousemen themselves and kept in store for a length of time to earn storage, is a risk it would be unjust to impose upon the public, and is one that the warehousemen under such circumstances should themselves assume.

It was also proposed to form a holding company for the purpose of operating all the public elevators made so under the rule of the Board; but this has come to nothing. Nor has the committee been able to get a proposition from the elevator owners under which they would be willing to operate regular houses after January 1 next; therefore, concluded the committee, "it seems necessary to make immediately some provision

for the issuance and protection of regular warehouse receipts; therefore, we would offer as a suggestion to your honorable body the feasibility of taking over the warehouse business so far as it relates to the issuance and protection of receipts that are deliverable on regular contracts.

"Several of the elevator proprietors have offered to lease, or turn over, to the Board of Trade Association sufficient warehouse capacity to meet its requirements. Would it not be possible for the association to conduct the warehouse business in the same efficient manner that the weighing department is now operated and without meeting any more serious problems than have been successfully solved there? In some of its features the handling of the warehouse business in conjunction with the weighing department would be a benefit to the trade.

"The object sought to be accomplished by this plan is the security and integrity of our warehouse receipts, and not the conduct of the business for profit; and if there are no serious legal objections in the way, it may possibly be a solution of the question."

FOREIGN COMPLAINTS OF AMERICAN GRAIN INSPECTION REVIVED—THE REMEDY.

The complaints of the condition on arrival of American grain which have been so insistent during the past few years have been revived; and in addition to the correspondence on the subject between Messrs. Patterson of the International Committee and Mr. Courcier of the National Association, the consular reports of the Department of Commerce and Labor have been loaded with reports to the same effect. From these last, the notations below are taken as indicative of local feeling at points of arrival:

Consul Hamm, at Hull, England, noting an arrival from New Orleans in bad order, says:

It is not often that a ship arrives with so much spoiled corn aboard as the Cynthia had, but a corn-laden vessel rarely arrives without a smaller or larger fraction of its cargo damaged from bad loading or defective ventilation, or from the corn being too green to ship, or from all these causes together. Corn importers complain that in this way they are subjected to much loss, and their willingness to purchase corn from America has been consequently lessened.

Consul Hamm then proceeds to discourse with apparent wisdom on the assumed fact that the "arrival of damaged corn at Hull, and probably in England, has been especially noticeable since the practice of shipping from the Gulf port has come into use." This is, of course, a mere assumption; and the consul's notion that "corn shipped from the Gulf ports is more apt to become heated than if shipped from the North Atlantic ports," is not justified by the record.

According, again, to the report of Consul Hamm, published on April 15—

Another cause which hurts the reputation of American corn in the English market, it is asserted, is the inferior grade of corn which, very often, is certificated at a higher or better grade than what it really is, and the receiver is compelled to pay for the corn according to the grade stated on the certificate. Still another is the practice of mixing different kinds of grain, as oats with corn, and the certificate stating that it is oats pure and simple, and the receiver being compelled to pay for oats, although there is maize mixed with it. The present price of corn in Hull delivered is, wholesale, about \$5.16; retail, about \$5.40 per 480 pounds—that is, 8 bushels of 60 pounds each. The American bushel is 56 pounds. The present rate of freight from New Orleans and Galveston is 6 cents to 6½ cents per American bushel of 56 pounds. This is the freight only, and to this should be added the cost of insurance and working ex ship before the corn can be delivered to buyers. The cost of insurance is trifling per quarter; the cost of working is about 4 cents per quarter.

Maize is chiefly used for feeding cattle, both as corn and as cake, but corn that comes from the Black Sea and the Plate is largely used for poultry as well as for feeding purposes. It is generally split before being sold and distributed to different parts of the country.

The imports of corn from the United States

into England have fluctuated greatly, as the following table will show:

| | 1901. | 1903. | 1905. | 1906. |
|-------------------|--------------|--------------|--------------|--------------|
| Weight, cwts..... | 25,564,900 | 18,676,011 | 18,310,200 | 18,617,700 |
| Value..... | \$29,724,525 | \$23,423,585 | \$23,183,380 | \$22,404,233 |

On the contrary, it will be seen from the table that follows that the imports of corn from Argentina into England have largely increased. In 1905 the imports were nearly double what they were in 1901, while a still further large increase was recorded last year:

| | 1901. | 1903. | 1905. | 1906. |
|-------------------|--------------|--------------|--------------|--------------|
| Weight, cwts..... | 10,443,800 | 18,719,463 | 18,954,600 | 24,524,200 |
| Value..... | \$13,082,620 | \$22,529,105 | \$25,454,310 | \$29,024,457 |

It is plain from these facts that exporters of corn from the United States to England must change the manner of shipment so as to remove or at least lessen the liability of damage during the voyage if they are to recover or even retain a market in England. Exporters from Argentina are making strenuous efforts to get full control of the corn market in this country. They have already had much encouragement. One plan adopted by them is for the shippers to agree to recoup the buyer for all loss from injury to the corn while in transit, howsoever caused. This makes the shippers more keen in protecting the corn, and consequently themselves, from any carelessness on the part of the shipping companies in loading and in transit. It would doubtless facilitate business with America if corn were sold there by the shippers on exactly the same terms as that which comes from the River Plate.

At a somewhat later date Consul Mason at Paris reported:

It seems necessary to revert to the somewhat threadbare subject of American maize, the large and growing export of which is menaced by complaints that come from France, Germany, and other European countries against the damaged condition in which it frequently arrives at European ports. The dimensions of the traffic invest the subject with special importance. France imported from the United States in 1904 180,000 metric tons and in 1905 240,000 tons of corn. The exact figures for 1906 are not yet accessible, but it is unofficially stated that on account of the drouth and reduced forage supply of last summer this branch of import is still increasing. Of the 240,000 tons imported in 1905, 70,000 tons were distilled or manufactured into starch and glucose. The remaining 170,000 tons were used as feed for cattle, hogs, horses and poultry—that is, as an auxiliary to agriculture.

In close proportion to the increased import of corn are the complaints of French importers, distillers and agriculturists that an undue percentage of the American cereal becomes heated in transit and arrives in a musty, damaged condition, which greatly impairs its value or even renders it dangerous for certain purposes. Cases are reported in the agricultural papers where a large part of a cargo is found to be musty, the point of each kernel greenish in color, and covered with mold, or even showing evidence of germination.

Still later, Consul John L. Griffiths of Liverpool made the following additional report on the complaints in Europe concerning the methods now in force in the United States for the grading and inspection of grain:

This subject is very important in view of the increased importations of grain from Russia, India and Argentina. The complaint of the English corn trade associations, which is the complaint also of the continental associations, is that the certificate of the American inspector of grain has to be accepted as final in England and elsewhere, while no opportunity is afforded of challenging the correctness of the inspector's grading, which is often said to be improperly done. I have been told again and again by members of the local corn trade association that the American inspection in many instances cannot be depended upon by reason of the carelessness or inefficiency of the inspectors, and that serious differences have arisen between the English importers and their customers because of the dissatisfaction of the latter with the grain furnished to them on the basis of the American certificate. It is felt here and on the Continent that the foreign corn trade associations should have some voice in the appointment of the American inspectors, at least to the extent of determining their qualifications, and proper redress if their grading should be erroneous.

I understand that a conference has been had between some of the representatives of the English and Continental corn trade associations and the representatives of similar bodies in America, and it is hoped that a solution of the difficulty may be reached. Any delay in the matter jeopardizes more or less our grain exportations, because of the increasing ability of other countries,

especially of Argentina, to meet in great measure English and Continental requirements. The burden of the English complaint is not that there is any conscious or deliberate purpose to commit a fraud upon foreign buyers, but that under the prevailing system incompetent inspectors are sometimes appointed and that there is no relief against their incompetency.

In view of these complaints, which doubtless have some foundation in fact, though not so well justified as the concern of the consuls would seem to warrant, the Board of Trade of New Orleans has inaugurated a movement to bring about concerted action at the out-ports of this country to effect uniformity in the rules for the grading and inspection of grain. It is proposed that a mass meeting of representatives from the interested exchanges be called for the purpose of organizing a body to be known as the Export Grain Exchange International Association, which shall establish: First—Uniform rules for the grading of export grain; second—a time for the adoption of a standard sample, not to be changed during the crop year; third—measures for the enforcement of the rules and standard by the various ports. In order to make its regulations effective it is proposed that the association appoint a supervising committee, composed of three grain experts, who shall receive \$5,000 a year and expenses. This committee, it is proposed, shall examine samples of all grain exported and shall have authority to visit the various ports and notify the foreign trade in case any port shall fail to live up to the regulations adopted by the Association.

In order to bring this plan, which is the creation of the grain committee of the Board of Trade to the direct attention of the grain trade, the Board has sent the following letter to the exchanges at Philadelphia, New York, Galveston, Baltimore, Boston, Port Arthur, Texas, Mobile, Norfolk, Pensacola, Fla., Newport News, Savannah, Ga., Portland, Me., and Charleston, S. C.:

In presenting this plan to you, we ask your hearty co-operation. We desire very much to have the proposed convention or meeting held in New Orleans, and will be pleased to have the various exchanges express themselves to this effect. However, we are not wedded to this idea, and will be glad to have the meeting at any centrally located point, being willing to have the various exchanges express their preference as to the place of meeting. We suggest any time during the first two weeks of June, or earlier, as the proper time for this meeting.

Delegates should be empowered with full authority to act for their exchanges, as we believe the action contemplated should not be deferred unnecessarily.

A similar letter is being sent to all the Atlantic and Gulf ports, as well as to exporting firms in the interior doing business through the various ports, and it is our intention to also advise the various European markets of the contemplated action.

The feasibility of establishing some system of uniformity in the grading of grain at exporting centers cannot be questioned. The export grain exchanges, as well as the exporters themselves, should favor the taking of some action which would result in the protection of their interests and trade; and the resolution of the European International Committee in re certificate-final has shown that it is the intention of the foreign buyers to make united and drastic demands unless the export grain exchanges of this country take some remedial action to correct certain abuses now existing in the inspection of export grain.

The promulgation of rules, and the establishment of standards, are matters of but little importance, unless these rules and standards are lived up to and absolutely followed in the out-inspection. It is an easy matter for the various exchanges to agree to the adoption of stringent rules, but it is a matter of great difficulty to force the inspection departments to live up to these rules.

We suggest that a call be issued by the New Orleans Board of Trade for a meeting of the representatives, with power to act, of all Atlantic and gulf ports exchanges, at which time there should be formed an association, which might be termed the Export Grain Exchange International Association, and each commercial body, having supervision of the inspection of grain for export, should be a member of this association.

The association, through appropriate committees, should establish:

First—Uniform rules for the grading of export grain.

Second—A time for the adoption of a standard sample, not to be changed during the crop year.

Third—Measures for the enforcement of the rules and standard by the various export ports.

In order to carry out this idea, we would suggest that the Export Grain Exchange International Association appoint a supervising committee, composed of three grain experts; men of high integrity and ability, who shall devote their entire time to the duties of their office. They should receive a salary of \$5,000 a year and all expenses. An office should be established at some central point, and to this office shall be sent a sealed sample of every shipment of grain loaded at the various ports. This committee shall examine the samples sent, and if, in their opinion, any port is grading out a quality of grain inferior to the rules or standard established by the Association, they shall, by communicating with, or personal visits to the offending port, attempt to rectify the grading of the grain.

It is our opinion that this association above referred to shall be recognized by the London and Liverpool Corn Trade Associations; and, in the event of any port, through its inspection department—after being duly cautioned—shall continue to follow a system of grading at variance with the rules adopted by the association, then this committee of experts shall be empowered to notify the London and Liverpool Corn Trade Associations of the conditions attending the inspection at the offending port, and shall advise European buyers to refrain from future purchases of grain shipped from said offending port.

This would have the effect of compelling the various ports to live strictly up to the rules and standards which they shall agree to.

The expenses attending the formation of this association, and the carrying on of the same, shall be met by contributions from the exchanges which are members of the association, in proportion to the amount of grain cleared through each port. This increased expense can be met by adding to the fees now applicable to out-inspection.

We feel confident that some action of this sort would meet with the approval of the buyers and associations on the other side, and restore confidence in American certificates."

This letter bears date April 24, 1907, and is signed by Henry B. Schrieber, President; H. S. Herring, Secretary, and A. F. Leonhardt, Chairman, Grain Committee.

BUCKET-SHOP LEGISLATION.

While in a number of states laws were enacted during the past winter to kill the bucket-shops, Douglas Pattison, a member of the house from a northern Illinois country county, succeeded in substituting for the definition of a bucket-shop in the bill before the Illinois legislature one that renders the bill useless for the purposes for which it was intended. The opposition to the bill in part came from the same source as that which prevented the passage of the Board of Trade bill two years ago, because it sought, in addition to legalizing transactions on the Board, to put the bucket-shops out of business. By reason of the activity of the lobby against the measure it gained about as much importance as the Board of Trade bill secured two years ago. In connection with the lobbying, which was not done in the open, a telegram came to light which indicated that extraordinary measures were taken to block the bill, and they apparently succeeded.

It is said the 25-cent tax on transactions is driving the shops from Missouri over to Kansas City, Kan., but the National Board of Trade, the biggest shop of all, is still in Missouri. The regular Board may test the constitutionality of the law.

It is understood the leading bucket-shop concern in Indiana is preparing to wind up its affairs by the middle of June, which is the time set for their closing up by the state authorities under the law recently passed prohibiting bucket-shops in that state. Iowa and Missouri have passed similar laws, and bills are pending in Michigan, Pennsylvania and Massachusetts, as well as in the Canadian Northwest provinces. Several of the most extensive systems will be out of operation in six weeks.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

CROP OUTLOOK IN IOWA.

Editor American Elevator and Grain Trade:—I have purchased the elevator building at this place that I have been operating under lease for the past year and a half, and next month I will move it about 300 feet west upon railroad ground.

Small grain crops have not been injured by cold weather, and are doing nicely. With favorable weather corn planting will be completed within the next 15 days.

Yours very truly, G. A. STIBBENS.
Red Oak, Ia.

THE HAY CONVENTION.

Editor American Elevator and Grain Trade:—July 16, 17 and 18 is the time and Niagara Falls the place of the fourteenth annual convention of the National Hay Association; and we ask hay men to arrange their affairs so as to stay a week at this charming resort. The hotel accommodations are ample and the rates reasonable. Invitations will be extended to all state and kindred associations to send delegates, and New York state has promised to furnish as large an attendance as all others combined. Begin now to arrange your affairs so as to attend the convention. President Wasmuth is at work on the program. It will be interesting and instructive, and with each member's assistance we can easily make this by far the best one we have ever held, and let me ask hay men to call on or write their neighboring dealer to attend the convention, and send me his name, or as large a list as each can, and I will give each of them a personal invitation to attend. Any information I can furnish will be cheerfully given.

Faithfully yours,
Winchester, Ind. P. E. GOODRICH, Sec'y.

KANSAS SHIPPING ASSOCIATION QUILTS.

Editor American Elevator and Grain Trade:—I believe that if all the shippers of the state of Kansas would spend an entire day visiting the railroad yards and the terminal elevators in Kansas City and note the condition of the loaded cars on their arrival and the method of inspection, they would be better prepared to cooper cars at point of origin and would not be so liberal with the inspection at home.

The Farmers' Co-operative Shipping Association, organized about four years ago with a capital of \$200,000, held the annual meeting in this city, and decided to liquidate and go out of business. They have sold 25 of their 37 elevators and the others are offered for sale. The officers of the organization admit a loss of about \$80,000, and blame the loss upon "lack of harmony" among the stockholders. This is the organization started by James Butler, and at the time it was organized he stated that inside of five years the farmers of the state of Kansas would ship all their own grain and save the producer from three to five cents per bushel. They undertook to enforce the penalty clause of their Constitution and By-Laws; and this failing, they circulated the report that the grain dealers were paying more for grain than any market would justify in order to disorganize the association. It is hardly probable that the promoters will succeed in organizing another company of this kind in the near future.

The 15 per cent reduction in grain rates ordered by the last legislature became effective May 2 and applies to all points in Kansas as well as Kansas City and St. Joseph, Mo. It was not expected that this rate would apply to points outside the state.

The Kansas Grain Dealers' Association is in a

very prosperous condition, having a larger membership to-day than at any time in its history, and I am still adding to the list of members.

Very truly yours,
Topeka, Kan. E. J. SMILEY.

CROP OUTLOOK IN THE NORTHWEST.

Editor American Elevator and Grain Trade:—Seeding has been progressing slowly during the past week. The ground freezes every night and permits of seeding during part of each day, except in the northern third of North Dakota and the extreme northwestern counties of Minnesota, where very little has been accomplished.

In Manitoba not much work has been done, and all observers agree that the wheat acreage there will be materially reduced.

Practically all of the South Dakota ground is seeded and the same is true of Minnesota south of Fergus Falls. The soil in all the territory continues in excellent condition.

It is now safe to say that our spring wheat acreage will be less than last year. The decrease will be chiefly in northwestern Minnesota and North Dakota, though the acreage is not likely to be equal to last year at any point.

All wheat seed now in the ground appears to be in good condition. It has been carefully examined by different investigators and the condition is satisfactory in every case reported to us.

Conundrum: "Why is 1907 like a lumber wagon? Because it has no spring!"

Yours truly,
THE VAN DUSEN-HARRINGTON CO.
Minneapolis, May 7.

WHAT THE IOWA ASSOCIATION IS DOING.

Editor American Elevator and Grain Trade:—The following, "Circular No. 1" on "Things We Do," will give a good idea of several lines of special work done by the office of the Secretary of the Iowa Grain Dealers' Association:

"Scale Inspection.—During the fiscal year ending March 31, our scale expert, E. J. Nolan, inspected and repaired 812 scales, working entirely under the supervision of this office. We ought to increase the number of scales to at least 1,000 per year, and could easily do this if all scale owners would fall into line with the idea of having their scales inspected once each year, which by our plan we provide an opportunity for doing at a minimum cost. We arrange the work so as to cover the territory in nearly the same order each year. When owners receive our letter soliciting the work under the group plan, they must bear in mind that it is the only opportunity we can offer on the \$3 basis until about one year later. We urgently solicit co-operation in this work. Scales should be tested by an expert once each year with not less than 1,000 pounds of test weights.

"Crop Reports.—Our first crop report for this year will be published about May 5, and we will use the map system the same as heretofore, but hope to add new features to make the reports more valuable from a grain-trade standpoint. We would urge our members to co-operate in this work by filling out these reports carefully and considerately each month, and we desire to have as many individual reports as possible in order that the computation of averages may most closely approximate the facts.

"Stock Reports.—We endeavor to show by computation of averages a comparison of the stocks of grain in store in country elevators in Iowa with same months of preceding years and also with the same date of each month during the preceding year, thus showing the tendency on the part of the dealers to store or ship the grain. In order to make these reports reliable we must urge our members to co-operate by filling the monthly inquiry blank forms.

"Legislation.—During the months of January, February and March, I gave considerable attention to legislative matters. We employed an attorney at considerable expense to advise us re-

garding the legal construction and constitutionality of the different bills offered that related in any way to the grain trade. There were thirteen such bills passed by the legislature, all of which are more or less favorable, and there were no laws enacted that were detrimental to the grain trade. We introduced and secured the enactment of the Whiting Bill, Senate File No. 305, placing the burden of proof upon railroads to show why cars cannot be furnished. This we believe to be a very important measure, inasmuch as reciprocal demurrage seems to be unconstitutional. There were five bills offered that related to a greater or less degree to the grain trade that were defeated, two of which were actively opposed by our legislative committee.

"Legal Advice.—We have made it a practice to obtain legal opinions for our members at considerable expense to the association, but without cost to them when the questions involved are of general importance to the grain trade. Hereafter we shall publish such opinions in circular form as an educational feature. Our members are expected to refer any such questions to me, and if we do not have on file any opinion covering the same, we will obtain it and give such additional suggestions as our information would justify.

Yours truly,
Des Moines, Ia. GEO. A. WELLS.

THE I. & M. CANAL.

Among the bills passed by the Illinois house of representatives was one appropriating \$78,000 for the repair of docks, dikes and dams at Henry and Copperas Creek in Illinois—a bill characterized by the Chicago papers, with their usual sneer at the Ill. & Mich. Canal, as "tadpole canal bill."

Now the Chicago press, for some reason inexplicable to common minds, have persistently, for several years, endeavored to convey the impression, which is generally accepted as true, that the I. & M. Canal is out of commission eastward of Joliet and is open for traffic only from Joliet westward. Such, however, is not the fact. The canal is now open to navigation through its entire length, as it has been ever since 1848, but after 1908 the channel east of Joliet will probably be abandoned and the drainage canal used instead.

Indeed, the Ill. & Mich. Canal is now in as good physical condition as it ever was; and as a direct competitor of the Rock Island and Santa Fe railroads, which hitherto have all but put it out of business, it has been restored by the new interstate commerce law to its old-time power as a regulator of rates. For 25 years or more the canal flourished, and up to 1876 carried to Chicago almost all the grain grown in the Illinois valley, the railroads getting so little of it that prior to about 1876 there was not a railroad elevator in a single canal town. However, about that time, as explained by Capt. W. H. Wallace of Henry, of the oldest existing family of Illinois canal and river boatmen, in an address to the For Ottawa Club, at Ottawa, Ill.: "A through billing was established whereby a grain buyer along the canal could only load grain on a car on the Rock Island, bill it through to the East, stop in Chicago, unload and pay his share of the through freight. The car would then be loaded with any other commodity and shipped on to the end of the billing. That reduced the rate so low that grain buyers along the canal sold their boats and shipped by rail. I know of a firm that sold a new canal boat for \$800, which cost \$3,000, and built a new elevator on the railroad, allowing the elevator on the canal to be torn down. This was the direct results of this discrimination. Understand, this could not be done at any distance from the canal."

"When the original interstate commerce act became a law it helped for a while and boats commenced to get back their trade again. But our railroad friends had the law amended so that

where railroads met water competition they could do anything they wished. They have been getting more determined all the time, trying to put an end to the canal, and they have had a billing in the past year, from this part of the country to Chicago, which figured out 1½ cents per hundred pounds on grain. Our canal boats could not live under such rates. While that was the rate in this territory, the rate from Rock Island to Chicago was 9.32 cents per hundred pounds. The new railroad law, which went into effect April 1, 1907, has put a stop to this discrimination in rates," however, and gives the boatmen a chance again.

Captain Wallace, some members of whose family has done business as carrier on the canal continuously since it was opened in 1848, with the exception of four years only, has so much faith in the canal that he is now organizing a company to put a fleet of grain and commodity carriers on the old "tadpole ditch," believing, as he does, that it is now out of the power of the railroads to put the canal out of business. He says:

The canal is here and belongs to the state. All we have to do is to put her to work and she will maintain herself. There will be no need of appropriations from the state. There is no reason why it will not pay when the government has removed the discriminating of rates. We have our right of way for nothing, except a little tolls in the canal—not as much as expense as a section gang on a railroad the length of the canal. Next season the drainage canal will be connected with the I. & M. Canal at Joliet, thereby giving us the use of the drainage from Joliet to Chicago free of tolls and avoiding the locks between Joliet and Chicago. When we get to Chicago, where the railroads have all kinds of high priced property, we have everything free. Not a cent to pay. The Government pays the bills. If a company on the canal had the taxes that the railroad pays between Chicago and Peoria it would be a big profit.

With a fleet of modern boats, equipped for grain and other commodities, Captain Wallace or any other boatmen on the canal would be able to pro-rate with the regular lines of lake boats for through shipments of all classes of commodities, and many shippers of heavy merchandise are ready, he says, to give them business at rates which would be much below railroad rates. Furthermore—

The Hennepin Canal will soon be finished. It runs through one of the finest corn belts in the state. Our boats could get freight there for Chicago.

I know a firm ready to build elevators on the canal as soon as it is finished. I rode several miles along the canal in an automobile with that gentleman, looking up sites for elevators. Whenever the deep water is completed, which certainly will be, we would be right in it. Our boats could be replaced with larger ones as they wear out.

In conclusion I would like to make a few remarks about the state appropriating money for the canal. The state has never appropriated any money to the canal but what rightfully belonged to her. Several times the legislature has made emergency appropriations which never were used but returned. In addition to paying for the building of the canal, the canal has deposited with the treasurer of the state of Illinois, over \$1,000,000. Fifty thousand of this was deposited no later than Altgeld's administration. The canal has today to her credit a deposit of about \$700,000, which she is not allowed to use. I believe nothing but railroad influence keeps it from her.

WOOD RAIDED AT WINNIPEG.

On April 13 the Winnipeg police raided the premises of the Canadian Stock and Grain Company, the Canadian branch of the Wisconsin Stock and Grain Company and the Superior Board of Trade. George W. Wood, president of the concern, was haled into court and charged with conducting a bucket-shop, and those in the place with being frequenters of it. Wood was committed for trial, but this did not deter him from still carrying on the business, and later he was further remanded on a charge of embezzling \$1,000 in connection with the purchase of Cananea Copper stock.

The Canadian Stock and Grain Company had

a dozen offices in the Canadian Northwest, all of which were closed by the police.

On May 6 Wood effected a settlement with the authorities, agreeing to settle all outstanding claims. For this purpose he paid all costs of suit and deposited with the attorney-general as trustee \$20,000 to settle claims.

This bucket-shop outfit was the most impudent in its behavior in Winnipeg. In spite of the severity of the laws, on going into Canada last October, it advertised openly and lavishly in the public prints and in every way openly defied the laws and the authorities and spent \$80,000 for leased wires.

AN UNUSUAL BREAK.

The accompanying illustration shows a car that was unloaded at Peavey Elevator "A," Chicago, on April 9. The shipment was oats; and the break in the floor was caused by the car wheels. The car had probably been in a wreck of some kind



AN UNUSUAL ACCIDENT.

and the floor was pushed up in the manner shown.

This is the first accident of the kind which has come to the notice of the Chicago Board of Trade weighing department, which took the photograph. Such accidents as this cannot be foreseen by the shipper or guarded against. The railroad is responsible, of course, for the loss, and its unusual character makes it a matter of more than ordinary interest.

RELOADING FORBIDDEN.

The following elevators at Minneapolis have received notice from the C. M. & St. P. Ry. Co. that "cars coming to your elevator must be returned loaded or empty to the line owning or delivering the cars—cars of the ten railways entering Minneapolis to the lines owning them, and cars of outside lines (foreign cars) to the lines from which they come to you. If you are not able to reload in accordance with this any cars unloaded by you, such cars should be released empty in order that they may receive proper loading elsewhere or be returned to the proper lines empty."

As this order confines all cars to switching limits and prohibits the use of empties for transferring wheat to the mills from the elevators, the elevator men say the restriction will put them out of business.

Clinton, Iowa, since the opening of the Clinton Sugar Refining Co.'s works, has become a large consuming corn market. The yield for the works is about 8,000 bushels per day.

[For the "American Elevator and Grain Trade."]

NEW RECONSIGNMENT R. R. BUREAU.

BY L. C. BREED.

Through the efforts of J. C. Lincoln, traffic commissioner of the Merchant's Exchange, the Eastern lines will establish at St. Louis a Reconsignment R. R. Bureau for the purpose of facilitating the adjustment of freight rates on through business in grain and grain products. By this arrangement, shippers may register their freight expense bills with the Bureau and when a shipper has occasion to use the same in order to receive the benefit of the proportional rates through to destination east, reference will be made to the registration by the Bureau which can then furnish to the railroads who issue the bills of lading, evidence that the shipper is entitled to receive the benefit of the shrinkage in the rate, and also of milling-in-transit privileges, when carried in the original billing.

The Bureau will have offices on the second floor of the Exchange Building, thus making it convenient for the transaction of this business, since nearly all the firms engaged in grain, flour and feed trades are located either in, or in the immediate vicinity of, the Exchange.

For some years the Southeastern lines have maintained a Bureau, with offices in Odd Fellows' Building for the purpose of adjusting freight rates on grain entitled to through-billed shrinkage rates in reconsigning same to points in the Southeastern territory. The location of these offices being at some considerable distance up-town has long been a subject of complaint on the part of shippers and assurance has now been given to Mr. Lincoln that as soon as the change can be effected, this Bureau will be located in the same offices with the new Bureau representing the Eastern lines. The inauguration of the new Bureau and the change in location on the part of the Southeastern Bureau, will greatly facilitate business through saving of time and in the case of producing the requisite proof of being entitled to rate shrinkage when the shipper reconsigns his grain.

CONCRETE FOR ELEVATOR CONSTRUCTION.

Apropos the elevator of the Goderich Elevator and Transit Company, illustrated and described in the April issue of this paper, the Canadian Cement and Concrete Review adds some details of the construction of this monolith building which may be found of interest. For example, the, perhaps, most essential feature of the concrete construction was the reinforcement by means of the Tromhauser method of interlacing with steel bars, which may be described substantially as follows:

At each corner or intersection of the bin walls an upright bar of 1½-inch round steel extends the entire height, around which the hooked bars are placed in a manner which forms a perfect interlacing, embedded every two feet in height over the entire concrete surface of the bin walls.

These hooked bars are of square steel, varying from ½ inch to 1½ inches in thickness, the heavier bars being used at the bottom and decreasing in size as the wall rises until the top is reached, where the heavier bars are again used to overcome any tendency to spreading. The bin walls are built with greater thickness at the center than at the ends, which, with the curved reinforcement bars, provides an additional strength to withstand the lateral pressure of the grain.

It is calculated that there are still 10,000,000 bushels on the farms of Saskatchewan, and at least half of this amount must come to market. The balance may be used for seed, milling and for local consumption. Cars to transport 5,000,000 bushels are not easy to find, and if the companies supplied 50 per day more, then three

months would be required to take out the grain now with the farmers. If the amount in the elevators be also taken into consideration the railways would need to supply more than 150 cars per day for three months.

THE SUPERIOR BUCKET-SHOP.

Some interesting, but not unexpected, testimony was taken at St. Paul last month in the case of the Minneapolis Chamber of Commerce against the Wisconsin Grain and Stock Company of Superior, which is charged with illegally using quotations of the Minneapolis Chamber for bucket-shop purposes. There has never been any doubt of the character of the business of the defendant company, the successors of Edwards-Wood Company, but the examination of witnesses removed the cloak of respectability which has covered the Superior Board of Trade which for several years has paraded itself as a virtuous but very much abused institution.

Among other witnesses examined was one H. W. Moore, who in 1905 went to Superior at the suggestion, he said, of L. A. Wood, to establish himself in business, Wood agreeing to supply the money—\$100 in cash down and \$60 a month thereafter. Moore traded in the pit of the Superior Board of Trade, "buying and selling wheat and other commodities in the pit" with the same sort of solemnity that might have been expected of a good story teller at a corner grocery. The purchases and sales always managed to come out even, so there was never anything to be delivered! Quotations were always moved by an eighth, so as to hide the fact that they came from Chicago, Minneapolis, etc., and when they came in Wood told Moore what to bid, which was the price that appeared marked on a slip of paper. The other bidders did the same thing; and then the quotations thus made were posted on the board and then sent out on the wires. "We varied the quotations from a sixteenth to a quarter," said Witness Moore; "on a dull market we varied it more; only old employes of Wood were allowed to handle the slips. I deposited the \$100 in a Superior bank. When the market closed we copied our sales and purchases on sheets. We then figured up our balances and if there was any large difference we put in enough additional trades to make it about even. We calculated so as to leave a small balance due us for which the clearing house gave us a check. At the end of the week the amount I had received amounted to about my salary." This evening up process was for the purpose of avoiding large balances.

A. S. Hicks testified that he was hired by the Edwards-Wood Company at its office in St. Paul and sent to Superior with instructions, "to trade and make a market." While there he bought and sold many hundred thousand bushels of wheat without orders from Wood or anyone else for his sales or purchases, but his transactions were all with two men whom he knew to be in Edwards-Wood's employ. The substance of his lengthy testimony was that the dealing on the Superior Board was farcical.

It also was made to appear that quotations were received from regular exchanges at Superior by means of a wire-tapping arrangement with a telephone company which ran a wire from Minneapolis to Superior, but the details of the testimony were not developed by the examination of witnesses. In examining the superintendent of the W. U. Telegraph Co. the attorney for the Chamber of Commerce asked the witness to explain the operation of an induction coil and various other similar instruments. After obtaining much technical information on this subject, including the statement that by placing a telephone receiver at or near a Morse sounder, a message in transit can be read, the Chamber's attorney, Mr. Mercer, suddenly began questioning the superintendent as to the location of wires in a certain so-called bucket-shop in Minneapolis and their proximity to other wires

over which chamber quotations are known to be sent. The witness seemed reluctant to answer many questions, but Mr. Mercer practically established, by the superintendent's own expert testimony, that the process of wire tapping, could have occurred in the office designated.

The testimony for the defense will be taken during this month, and then the special commissioner will submit his report to the U. S. Court for judgment.

C. S. WILSON.

Kansas has been a most excellent state to grow up with, in spite of its stormy early days and agricultural uncertainties of two decades ago, when it was uncertain whether the bugs of Colorado, the grasshoppers of the semi-arid regions, the knocks of the would-be settlers returning to "wife's folks," or the "buggy" legislation would defeat the Almighty's evident purpose of making Kansas a great commonwealth. The men who "stood to their guns," however, have won out.

One of these is C. S. Wilson of Ottawa. He hadn't much to say originally about going to Kansas; for he was born at Muncie, Ind., on August 20, 1873, and was taken to Topeka by



C. S. WILSON.

his parents in the fall of 1882. The family settled finally at Lyndon, where C. S. Wilson got his schooling—about six years of it. Having become a telegraph operator, in January, 1889, he entered the employ of the Santa Fe Railroad Company as operator and agent at various stations on the Eastern and Southern Kansas Division. He remained with the company until 1895.

Mr. Wilson got into the grain business at Lyndon by the purchase on January 1, 1896, of a half interest in the business of W. A. Cotterman. They operated as Cotterman-Wilson Grain Company, but in 1898 Mr. Wilson bought the other half of the business from Mr. Cotterman and continued the business alone (part of the time engaged in banking also) until November, 1903, when he sold out all his Lyndon interests and removed to Ottawa.

At Ottawa he took an interest with W. S. Williams in the grain and seed business, established by Mr. Williams in 1892, the new firm, the Williams-Wilson Grain Co., beginning business on January 1, 1904. On March 25, 1905, their plant was burned; but it was immediately replaced by a modern elevator and seed warehouse, which was ready for business in the fall of 1905.

This house is located on the Missouri Pacific track and is kept busy handling grain in transit from a number of stations on that road operated by the Williams-Wilson Grain Company.

The production of Indian corn in Portugal and possessions in 1906, writes Minister C. P. Bryan of Lisbon, amounted to about 20,000,000 bushels, which large crop restricted the demand for foreign corn.

LEGISLATURES WINDING UP.

IDAHO.—Senate Bill No. 34 has become a law. It provides for the appointment of a grain commission which will work in conjunction with similar commissions of Oregon and Washington. It will be the duty of this commission to establish grades for all grains each year, and to supply samples of such grain to buyers free of all cost. The commission will establish grades similar to those of Oregon and Washington, so that buyers in one state will be familiar with the grades of either of the other states. The bill provides also for a form of receipt to be issued by the warehouseman, which will state the variety of grain and the grade of the same, and the grain held under such receipt is exempt from all indebtedness and is negotiable.

MINNESOTA.—The late Minnesota legislature passed the following bills which have become laws:

H. F. 126, Zelch—Authorizing the railroad and warehouse commission to fix the fee for appeals for decisions of the grain inspectors.

H. F. 115, Vollmer—Prohibiting use of term "weighmaster" by unauthorized persons.

H. F. 110, Vollmer—Authorizing railroad and warehouse commission to fix hours during which local warehousemen shall keep open for business.

S. F. 230, Thorpe—Requiring warehousemen to make report on July 15 to the state, relative to year's business.

S. F. 127, Thorpe—Providing against deception in issuing receipts for grain, hay or straw weighed.

S. F. 643, Thorpe—Providing that fumigated grain must be sold as such.

H. F. 832, Zelch—Providing new form for grain storage receipt.

H. F. 831, Zelch—Providing new form warehouse inspection receipt.

H. F. 223, Carl—Prohibiting combinations in the purchase of grain and prescribing a uniform method of buying and handling in public warehouses.

H. F. 603, H. White—Concurrent resolution in reply to resolution of North Dakota legislature, criticising Minnesota grain inspection.

ILLINOIS.—It has been exceedingly difficult to keep track of the bills in the Illinois legislature in which the grain trade is interested, all of which has been delayed until the hurly-burly of the last days of the session, which closes to-day. However, it is known the bucket-shop bill as passed by the house will suit the tin-horn gamblers, and that the following bills were passed:

House 848 (Covey)—Provides for chief grain inspector of state, and giving railroad and warehouse commission general supervision over class A warehouses. In Chicago requires inspection of grain both on receipt and delivery by grain inspector. Deputy inspectors to be appointed by chief grain inspector. It also makes the state grain inspector chief over all country inspectors and requires warehouse men to make application for a grain elevator license to the Railroad and Warehouse Commission instead of the Circuit Court. It also requires that grain shall be inspected when received and when shipped out of an elevator.

House 746—Prohibiting warehousemen from delivering or grain inspectors from permitting delivery of grain from warehouses without notice from Warehouse Registrar that warehouse receipts have been registered for cancellation.

The house on May 1 killed the reciprocal-demurrage bill by a vote of 75 to 16. The bill was called up when a number of the country members who favored it were absent. The argument was advanced that Illinois did not need a law of this kind and the railroad men insisted the passage of the measure would work a hardship on the companies, which, of course, would never do.

The new grain assessment law of North Dakota provides that all grain grown within the

state and held therein in elevators, warehouses and granaries shall be taxed at a fixed rate, as follows: Flax at the rate of one-half of one cent per bushel, wheat at the rate of three-eighths of one cent per bushel, and oats, barley, corn, spelt and rye each at the rate of one-eighth of one cent per bushel.

MORE HOT CORN.

Complaints of hot corn were heard from both the East and Southeast all last April. At Louisville thousands of bushels arrived in practically unsound condition. Not since 1881 has there been such a large amount of corn spoiled in this way, according to old-time dealers. In that year, as this, an unusual season of hot, forcing weather several weeks earlier than anticipated was the cause of the loss. In Louisville the distilleries take only the best grades of corn for whisky and do not use the "hot corn" that comes to them. However, a good deal of it was sent to Peoria and other points where spirits are made, for the manufacture of which first-grade corn is not necessary.

At Birmingham, Ala., the new freight depot of the Illinois Central was used for a while as a drier and more than fifty thousand bushels of corn, arriving from the West, was spread out on the floor in the main part of the building to prevent germinating; and the statement is made that a large amount of corn was saved in this way.

The Hess Drier at Baltimore has done good service this season in turning out Hess-dried corn, both for export and reshipment for domestic consumption, the Daily Produce Report of April 19 saying: "The inspection of corn as reported from day to day shows a very large percentage of cars passing off-grade, the number of rejected being particularly noticeable. This is likely to convey an erroneous impression as to the grading in this market and make prospective shippers hesitate about sending corn here. So much of the present receipts is being inspected rejected because it was only rejected corn, sent here for the purpose of being dried, and was not shipped with any idea of its getting any higher grade. A considerable quantity is rebilled corn which, being out of order, could not be used as originally shipped to other points, and has been diverted in order to protect the shippers against great loss by employing the driers at this port. Baltimore is consequently not only taking care of a large quantity of rejected corn which otherwise would be impossible to handle, but is aiding other markets by taking the rejected corn and making it merchantable. The requirement of mixed corn in this market is still 'sound, dry and reasonably clean,' there having been no change for years."

Columbus, O., grain men say that there has been more "hot corn" this season than ever before in the history of the local grain trade.

NEBRASKA DEALERS ORGANIZING.

At a meeting of dealers in grain located along the lines of the Missouri Pacific in Nebraska, held at Nebraska City on April 20, an association was formed by the election of the following officers: President, W. E. Banning of Union; vice-president, E. A. Duff of Nebraska City; secretary and treasurer, A. B. Wilson of Nebraska City. It is named the Grain Dealers' Protective Association. The committee to whom was referred the matter of looking up the law and retaining attorneys reported that such suits to recover for losses due to inefficient service would stand under Nebraska laws and the injured party could recover damages.

Another meeting will be held in a short time at which a fuller report will be had from the committee and the various committees will be named.

W. E. COPENHAVER.

W. E. Copenhaver, secretary of the Foos Manufacturing Company, Springfield, Ohio, manufacturers of scientific grinding machinery, has made cottonseed and its products his peculiar specialty and enjoys the reputation of being one of the best versed men on cottonseed separation in the United States. Nearly every "cottonseed" man knows Mr. Copenhaver either personally or by reputation. Here is a man to whom they all are indebted, for the good and sufficient reason that he has aided to no small degree in making the once rejected cottonseed the useful and profitable commodity that it is to-day. Cottonseed separation has been an all-absorbing problem with him. Not only has he invented machinery for this work, but he has assisted others to perfect machinery that has added many thousands of dollars to the profit side of the cottonseed man's ledger. What was once considered a



W. E. COPENHAVER.

waste product has been converted into a most valuable one which enters largely into the profits of the oil mill.

Mr. Copenhaver has been a prominent figure in all cottonseed men's conventions for years and has devoted years of patient study and experimentation to cottonseed hulling and separation, and a visit to any of the up-to-date modern oil mills will show that the results of his research are manifest on every hand. He is in constant touch with the trade, visiting the largest and most prominent firms at frequent intervals.

HARROUN PAROLED.

W. H. Harroun of St. Joseph, Mo., formerly president of the Harroun Elevator Company, charged with forgery in the third degree on seven counts, on April 25 pleaded guilty in the Criminal Court to forgery in the fourth degree on three counts and was sentenced to serve six months in the county jail for each. He was then admitted to parole, his parole bond being signed by Leo Willman, a commission merchant, at \$500 on each count.

Harroun was tried a long time ago on one of the original counts against him and convicted of forgery of bills of lading for grain upon which he obtained loans from banks of various cities. The case was appealed and reversed by the Supreme Court. Of the six remaining counts three were nolle prossed by the prosecuting attorney.

The way stuff is sometimes moved in the Southwest was illustrated by a letter of April 22 from Wichita, which said that E. N. Nevlin ordered a carload of bran from Greenwich and it was 140 days en route. W. Watson sent a car of flour to Newton and it was 28 days on the road. Newton is 28 miles from Wichita. The car traveled on an average of less than a mile

a day. Frank Schwarts, of the Schwartz Lumber and Coal Company, says that last November he ordered a carload of shingles from the Puget Sound lumber district and that a few days after placing the order he received a bill of lading, showing the car had been loaded and was ready for shipment. That was the last he has heard of the car, although he has made many demands for its delivery.

THE ALLOWANCES DECISION.

The Commerce Commission on April 18 issued an order directing the Union Pacific Railway Company to reduce the elevator allowance made to the Peavey elevator at Council Bluffs and Kansas City (Omaha Elevator Company and Midland Elevator Company) from $1\frac{1}{4}$ c to $\frac{3}{4}$ c per hundred pounds.

The complete decision in the case (by Commissioner Harlan) has not yet been published, but the Commission furnishes a summary, which is as follows:

"Elevation is defined as unloading grain from cars or grain-carrying vessels into a grain elevator and loading it out again after a period of not to exceed ten days. It does not include treatment or grading, cleaning and clipping of grain; and retention in an elevator beyond ten days becomes storage and is not a part of the service of elevation, as that word is used in the statute.

"The law clearly recognizes elevation as a facility that the carriers may provide; and this authorizes the carrier to grant grain elevation at destination or while the traffic is in transit, subject only to the restriction imposed by the act, that elevation, like any other service offered by the carrier to shippers, must be open to all on equal and reasonable terms.

"Since a carrier subject to the act to regulate commerce is entitled to provide elevation for grain shipments, such carrier may either construct and operate the elevator itself or furnish elevation by arrangement with an owner of an elevator; and the amount of compensation paid by the carrier to the owner of an elevator rendering the service is of no concern to shippers or to other carriers unless it operates to affect the rates charged by the carrier upon the grain traffic or unless by some device a portion of the allowance is returned to shippers, and thus becomes a rebate.

"An allowance made to a shipper of grain who furnishes elevation service under an arrangement with a carrier is a rebate and an unlawful discrimination when it involves a profit over and above the actual cost to such shipper of the service rendered. It is not a rebate when the allowance does not so exceed the actual cost.

"The arrangement between the Union Pacific Railroad Company and the Peavey Elevators at Council Bluffs and Kansas City is not in itself unlawful. But the allowance of $1\frac{1}{4}$ cents per 100 pounds paid by the railroad company to these elevators, controlled by the Peavey interests, who are large shippers of grain, and own practically all the grain going into the elevators, is in excess of the actual cost of the service, and is a rebate and, therefore, unlawful.

"The commission orders that the allowance by the Union Pacific Railroad Company to the Peavey Elevators shall be reduced, and shall not exceed $\frac{3}{4}$ of a cent per 100 pounds, such order taking effect June 1, 1907."

Commissioners Lane and Clements dissented from this view, and their opinion will be made public late, presumably when the printed record in the case is completed by the publication of the majority decision.

The first fruits of the decision was the announcement that on and after May 7, the C. G. W. Railway will pay $\frac{3}{4}$ c per cwt. on all grain handled through elevators at the Missouri river and shipped via that line. The payment is to be made to the owners of elevators only and not to commission firms or owners of the product.

What the other lines will do to meet the competition has not yet been decided.

GRAIN DEALERS' MEETINGS.

Oklahoma Grain Dealers' and Oklahoma Millers' associations, Oklahoma City, May 20-21.

Texas Grain Dealers' and Texas Millers' associations, Fort Worth, 23-24.

National Hay Association, Niagara Falls, July 16, 17 and 18. "Get on the Boost Wagon. Don't you know there's fun boosting?"

The Iowa Grain Dealers' Association's annual meeting will be held in July, probably about the 12th to 14th.

Ohio Grain Dealers' Association meeting will be at the Breakers, Cedar Point, Sandusky, on June 26-27.

Illinois Grain Dealers' Association, Auditorium Hotel, Chicago, June 11 and 12.

Kansas Grain Dealers' Association may hold a meeting between June 1 and 15—not positively announced at this meeting.

THORNTON ON DURUM.

Charles H. Thornton of the Duluth Market Record, official paper of the Duluth Board of Trade, is the most consistent friend of the durum (macaroni) wheat in the Northwest. He has never tried to discourage it by useless "knocking" and has studied this class of wheat sufficiently to see clearly the facts in their proper relations to the farmer, the grain trade and the miller. His views on the per cent status and prognostications of the future commercial importance of durum wheat are therefore of more than usual value. In a recent communication to a Minneapolis farm paper he says:

"The commercial value, actual as well as relative, of durum (macaroni) wheat is probably of greater interest this spring to producers of wheat in the Northwest than any other subject with which they are confronted. And probably less is known about the value of durum than is known about any other cereal grown in the Northwest. As a student of the durum wheat movement from the time the crop first assumed proportions, giving it a place in the world's markets, I am convinced that durum is destined to make a place for itself as a regular and valuable crop for certain sections of the Northwest. In qualifying this statement by saying 'certain sections' I mean that durum is particularly adapted to light soil, and I believe in the present stage of its development that growers will make a mistake by growing it on heavy soil. This also is the consensus of opinion of large producers in the Northwest who have raised it during the last three or four years.

"Durum wheat was originally brought from Russia by the United States Agricultural Department, with a view of having it grown on the light soil of the semi-arid regions through the Dakotas and Nebraska. By semi-arid I mean sections having a normal rainfall of ten to fifteen inches yearly. The first crop of any magnitude raised was that of 1904, when the total was around 8,000,000 bushels. A large proportion of this was shipped through Duluth, mostly for export, although it was taken in a small way by numerous mills through the East for experimental purposes. It will be remembered that 1904 was the year of the shrunken crop in the regular varieties of spring wheat, and at one time during the fall months of that year durum wheat sold at a discount of about 25 cents a bushel under No. 1 northern, but before the next crop came in the discount had narrowed to 4 to 5 cents a bushel. In 1905 the crop was around 18,000,000 bushels, and a little over 8,000,000 bushels of it went through Duluth, mostly for export, as Eastern millers who had used it did not seem to care to repeat their experiments of the year before. This past year, 1906, the crop has been variously estimated at 40,000,000 to 60,000,000 bushels. I my-

self figured the crop early at around 45,000,000 million bushels and have seen no reason to change those figures. Up to the close of navigation last fall a little over 12,500,000 bushels had been received at Duluth and forwarded to the Atlantic seaboard, and, as during previous years, almost entirely for export.

"A peculiar feature of the durum price problem has been that every year since 1903 we have been told that the demand was limited, and on the 1905 crop when, as stated above, we exported \$8,000,000 bushels, it looked as though another million or two would have filled the foreign markets to the point where they would not take any more, and it surely did look as though the 1906 crop with its increase of over 100 per cent would glut all markets and that durum would have to go to a feed basis; but so far, with exports of over 12,000,000 and sales of four or five million more to go out in the spring, we are confronted with a demand that shows no signs of being satisfied.

"As a matter of fact, it is now a fairly well settled matter that all of the durum wheat from the 1906 crop will be wanted and at relatively good prices, as compared with regular spring wheat; but we are unable to determine whether or not the demand this year is due, as it was during each of the previous years, to unusual conditions in the European markets. American millers, with few exceptions, are just as antagonistic to durum wheat as they have ever been, probably more so, but we do know that English and German millers who used it in 1905 for making bread flour and again last fall are back again and buying it for spring shipment. It is my personal opinion that the failure, or partial failure, of the Russian crop has had little or nothing to do with creating the present year's demand for durum wheat. I think it is due largely, if not entirely, to the fact that the wheat is selling at a lower price than other spring wheat, and that foreign millers have learned how to use it, and foreign bakers have learned how to make bread from it, and with the necessity for economies abroad they are ready and anxious to take it at a discount.

"As regards the prospective price for durum the coming fall and winter, I feel that the world's markets will absorb all and more than we can raise in the Northwest; and no other section of the country is going in for it to any large extent. It is now a very well established fact that Russia, which has heretofore been the world's largest exporter of wheat, cannot again be a factor of any magnitude until 1908, at the earliest, and European countries will be looking for cheap wheat this fall wherever it can be found. By cheap wheat I mean wheat selling at a discount under standard grades, and at a nominal discount durum wheat is a much more profitable crop, provided one has the proper soil on which to raise it.

"There are, as stated above, undetermined facts about the future of durum wheat, but they seem to be working out, and I have no doubt will work out. The principal ones of these is the antagonistic attitude of American millers, and in my conversations with millers who have experimented with it I have come to the conclusion that their attitude is sincere and that they cannot find it profitable, either alone or as a mixture; but whether they do or not, I believe, as heretofore stated, that the world's markets for wheat warrant us in the opinion that it will all be wanted and at relatively good prices. To Northwestern farmers who have not heretofore raised durum I would suggest that they go at it in a small way only, taking care to select good seed—the best No. 1 grade is none too good—and to seed it on light soil only. The best success seems to have been attained by cross drilling, using about a peck more to the acre than the ordinary varieties of spring wheat. The necessity for more seed to the acre is occasioned by the fact that kernels are larger and require more to get results."

[For the "American Elevator and Grain Trade."]
GRAIN RECEIPTS INCREASE AT ST. LOUIS.

BY L. C. BREED.

Grain receipts at St. Louis for April gained 752,000 bushels over April last year. Grain shipments from this market gained 721,000 bushels for the month. For the first four months of this year, grain receipts show an increase of nearly 7,000,000 bushels compared with last year. Shipments for the period decreased.

The increase in receipts is unusually large this year, and indicates a substantial development of St. Louis as a grain center, following a long period of comparatively slow expansion. A valuable aid in this direction is found in the efficient work of the Traffic Bureau, since the matter of freight rates is an important feature of the grain business. It is believed that had it not been for shortage of cars, which has handicapped both the country shipper and the local grain men, a still larger movement to and from this market would have taken place. It is claimed that had cars been available during March and April, stocks of wheat at St. Louis would have been greatly reduced. Many orders were received from Southeastern millers which could not be executed for lack of cars. This difficulty was not experienced to so great a degree in case of corn and oats, as the Western cars in which corn and oats arrived were to a considerable extent available for reshipping. The wheat receipts, however, were light, and notwithstanding ample supplies were obtainable from store, business was materially cut down by the inability of Southeastern roads to handle the grain offered them.

OHIO SHIPPERS' ASSOCIATION.

At the annual meeting in April of the Ohio Shippers' Association the following officers were elected: H. S. Grimes, Portsmouth, president; John R. Flotron of Dayton, A. L. Stone of Cleveland and John R. Puck of Toledo, vice-presidents; J. W. McCord, Columbus, secretary-treasurer; E. W. Seeds of Columbus, chairman, and O. N. Townsend of Zanesville, J. N. Baldwin of Niles, W. L. Wampler of Dayton, W. S. Thomas of Springfield, S. G. Gilfillan of Ironton, and W. B. Moore of Dayton, members of the executive committee. The joint conference and other committees will be named by the executive committee.

OHIO GRAIN DEALERS' ASSOCIATION.

The Ohio Grain Dealers' Association will hold its twenty-eighth annual meeting at the Breakers, Cedar Point, Sandusky, Ohio, during the last week in June, going the 25th and returning the 28th. Two full days, the 26th and 27th, will be used for the sessions of the meeting. A most excellent program will be arranged. An unusual number of interesting speeches will be delivered and papers read by parties prominent in the trade and competent to enlighten the meeting on their different subjects. Many special features for entertainment have been arranged for.

J. T. Bradshaw, chief weighmaster for the state railroad commission, is endeavoring to secure scales at Kansas City, Mo., to weigh all grain received.

The eastbound roads entering St. Louis are arranging for the establishment of a joint transit bureau to supervise the reconsignment and milling in transit of grain from St. Louis, East St. Louis and Alton to eastern cities.

The frequent and further advance in sample corn justifies our urgent advice during past ten days to consign corn. Our aim is to make these letters of service to those who handle cash grain.—Pope & Eckhardt Co., April 24.

THE "GREEN BUG."

The "beast" commonly called in the newspapers "the green bug," which devastated the wheat fields of Texas and did an undetermined amount of damage to those of Oklahoma, is technically the "Spring Grain-Aphis" (*Toxoptera graminum* Rond.). It is probably an imported insect, says F. M. Webster, of the Bureau of Entomology, in charge of cereal and forage-plant insect investigations, author of Circular No. 85 of the Bureau, descriptive of this insect, from which the following is taken:

"It was first described by Dr. C. Rondani (probably from Bologna, Italy) in 1852, just thirty years prior to its discovery in America. Rondani states that in June the winged migrants were so abundant in the streets of Bologna as to cause the inhabitants great annoyance. The first time the insect came to notice in America, specimens were sent to the Department of Agriculture, but from what locality is not known. In June, 1884, it was found in some abundance near Cabin John, Md., on wheat. A few days later, that is, about the first of July of that year, the writer found it infesting the wheat in his breeding cages at Oxford, Ind., where he was temporarily located as a field agent of this department.

"This pest seems to be rather erratic in its outbreaks in both Europe and America. To the agriculturist it suddenly appears in immense swarms on the grain in the fields in spring, ruins the crop over large areas of country, and does not reappear in destructive numbers, perhaps, for many years. The fact is, however, that it can be found in the grain fields during any year, throughout the region it infests, although it may not be sufficiently abundant to work serious injury. The extreme rapidity with which this insect multiplies, unless restrained by natural checks, gives color to the farmer's belief in its sudden appearance, for within a few weeks, from numbers too few to be readily noticeable, it will develop myriads that swarm over the green plants, turning whole fields of thrifty grain to brown, dwarfed plants that produce no heads, or else, reaching a height of not more than 6 to 8 inches, have heads that are foreshortened and nearly devoid of kernels. Thus it is that within the short space of less than twenty years this aphis has come to be one of the worst pests of its kind in the grain fields of the south-central portion of our country.

"The life cycle of this insect does not appear to differ from that which is usual among aphides. The single generation of males and sexual, or egg-laying, females appears, as far north, at least, as latitude 40 degrees 27 minutes, in October, but possibly earlier to the south. The egg-laying female is wingless and may be easily distinguished by her position on the plant, the body being held almost at right angles instead of parallel to the leaf. She may be further identified by the eggs, which show through the skin, their outlines appearing like lateral oblique lighter lines on the abdomen.

"The eggs, which are glossy green immediately after deposition, but later turn jet black, are laid among the grain plants in the fields. Possibly some are placed elsewhere, but if so the writer has failed to find them. While these aphides overwinter in the egg state, they also pass the winter as viviparous females in the fields as far north as latitude 40 degrees 27 minutes, where the writer has found them reproducing by the first of April. The writer has kept them breeding within doors, where the temperature during the night frequently fell below the freezing point and ink was frozen in the inkstand on the desk. In this way they were reared throughout the entire winter of 1889-90 at Lafayette, Ind. In the same locality, in 1884, they were breeding in the fields until after the middle of December. There is no doubt whatever that in the South, and even as far north as St. Louis and Cincinnati during mild winters, the species breeds in this way during the entire winter, though the eggs deposited in fall probably do not hatch under such low temperatures, but remain unhatched until spring.

"When the foliage of the cultivated grains becomes too old and toughened to afford them sufficient nourishment, the young—as is usual among aphides—develop to winged viviparous females (i. e., winged females that give birth to living young, Fig. 1, a) and forsake the grain fields. Thus it is that the migration from the grain to the alternate food plant takes place in June, while in the fall of the year the aphides return to the fields instead of leaving them, although the latter is the rule with most of the other species whose habits are well known. It is this variation from the usual habits of allied species that renders this particular aphis so destructive in grain fields and its control so exceedingly difficult.

"With the appearance of the young grain in

the fields in autumn the aphides again appear, being represented by winged females that soon begin giving birth to young, and various sizes of the latter according to age may frequently be observed surrounding the mother on the leaves. Young develop to adults and themselves begin to reproduce within the space of a week, so that in favorable weather several generations may be fully represented on the same plant by young of all ages and winged and wingless females.

"In experiments with a winged female in April, in Indiana, the writer obtained thirty-seven offspring within the period of eighteen days, and at the end of this time some of her firstborn were themselves grandmothers. From the writer's experience with allied species it is probable that the wingless female is much more prolific than the winged female, so that it would be entirely within reason to suppose that a wingless mother would be capable of producing at least double the number of young mentioned above within a slightly more extended period of time. It will thus be seen that within a brief period, under

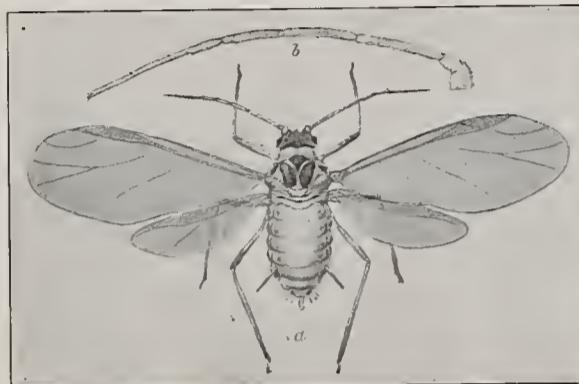


Fig. 1.—THE SPRING GRAIN APHIS
(*Toxoptera graminum*).

a, Winged migrant, much enlarged; b, antenna of same, highly magnified. (Original.)

favorable circumstances, a comparatively few females may become the progenitors of the enormous swarms of these insects that overrun and destroy fields of grain over vast areas of country.

"The writer has found this grain aphis breeding freely on wheat, rye, oats, barley, and corn, though it seems to prefer wheat and oats. Orchard grass seems to suit the taste of these insects almost as well as wheat, and it is probably to this and some other grasses that the winged

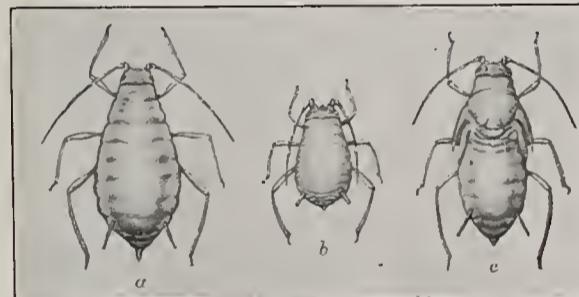


Fig. 2.—THE SPRING GRAIN-APHIS
(*Toxoptera graminum*).

a, Wingless female; b, larva; c, pupa. Much enlarged. (Original.)

females migrate when they forsake the grain fields in June. Rondani gave as food plants oats, wheat, spelt, couch grass, soft chess and corn. In 1863 Passerini added sorghum. It seems quite likely, therefore, that the present list of this insect's food plants in America may in future be considerably enlarged.

"While more or less common every year, the occurrences of this grain aphis in such destructive abundance over such a large area of country at such long intervals of time are somewhat puzzling phenomena. When first met with by the writer, in 1884, the insect in question was not at all injurious, and it was more than five years later that it was again encountered—this time as a serious pest. This was the outbreak of 1890, which proved so disastrous to wheat and oats over a section of country extending from Texas to northern Missouri, through southern Illinois and Indiana to eastern Kentucky and Tennessee. Oats were destroyed as far north as Franklin, Ind., latitude 39 deg. 30 min. Though quite abundant at times, this aphis did not again cause serious injury until 1900, when the Southwest again suffered an outbreak which, while even more serious in Texas than was the one in 1890, did not extend so far northward. The present year (1907) there is every indication of a recurrence of the pest, for as early as January this insect was reported by Mr. W. D. Hunter, of this Bureau, as destroying the fall wheat and oats in northern Texas.

"Not only is this aphis enormously parasitized, but toward the last of May and in early June

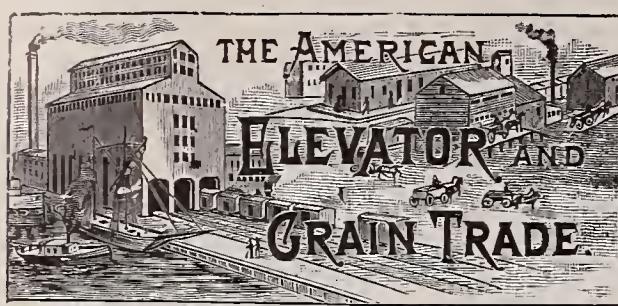
both young and old are devoured by lady beetles and their larvae, great numbers of which can be observed at work in infested fields. Of the hymenopterous parasites Ashm. is especially useful. In southern Indiana, in 1890, this little slender, black, four-winged fly became excessively abundant and destroyed myriads of the pest. When at work this diminutive enemy of these aphides may be seen running over the plants, thrusting its ovipositor into their bodies. Soon thereafter the body of the parasitized aphis becomes swollen and rounded, and at the same time the skin hardens and changes in color to a leather-brown. Shortly after, a circular disk is cut by the parasite in the body wall of its host, and pushing this out the fully developed insect makes its way forth to at once begin laying eggs in the bodies of others of its host, both old and young. In southern Indiana, in 1890, these parasitized individuals became so abundant on the leaves of the grain as to add materially to the brown color due to the effects of their own feeding on the plants, and their presence could be noted from a considerable distance. Prof. E. Dwight Sanderson, while at the Texas Experiment Station, came to the conclusion that in Texas the natural enemies ordinarily destroy such large numbers of this pest that it is held in check thereby. The writer came to a similar conclusion many years ago, and concluded, further, that the abundance of these parasites throughout the area in which this aphis is destructive is primarily regulated by the weather during the time intervening between November and May.

"Attention has already been called to the fact that the spring grain-aphis can breed in the fields during the prevalence of a temperature that would render most insects inactive. It seems almost equally clear that serious and widespread outbreaks of this insect are due to a lack of a sufficient number of parasites to hold it in check. Added to this is the fact that disastrous outbreaks have followed mild winters, succeeded by a spring that was below the normal in temperature and more or less stormy. The writer has observed, in the case of other aphides, that seasons of unusual abundance are preceded by cold, wet, and usually "backward" springs. The situation, then, is probably this: The pest is ordinarily kept down by its natural enemies, but during open winters—not sufficiently mild, however, to render these enemies active—it breeds unrestrained, and the exceptionally cold, wet spring enables it to continue breeding while the parasites are still inactive; thus the pest is enabled to get the advantage in point of numbers and work its devastation before the natural enemies can become sufficiently abundant to overcome it.

"It can be seen, therefore, that although the farmer's interests are involved, he is unable to determine for himself just what is going on in his fields. He cannot foretell the weather months in advance and has no way of knowing when to expect a recurrence of a serious outbreak of the aphis until it is too late to ward off its consequences. The reader will correctly infer from the section on preventive and remedial measures which follows that when spring approaches there is little that can be done by the farmer to improve the situation in case the insects are present in great numbers; but the outlook is by no means the gloomy one that may appear from this statement. Following the spring rains there usually comes, sooner or later, a period of dry, warm weather, and when ever such a period comes the aphides very soon disappear. The reason for this is that their parasites and natural enemies, no longer deterred from activity by cold and wet, immediately begin to breed with extraordinary rapidity and bring about their practical destruction. Should this warm, dry period come later than usual, greater damage is inflicted by the aphides; should it come earlier than usual, serious injury is correspondingly obviated.

"We really know far too little of this pest to be able to deal with it satisfactorily. It would seem that the later in the fall grain were sown the less attraction there would be for the pest to invade the fields in fall. Late sowing, then, is about the only preventive measure that can be suggested.

"On the subject of treatment for these insects there is not much more to be said. It is probable that a great many of the aphides could be destroyed by rolling the fields as soon as the pests appeared on the leaves in any considerable numbers. Brushing over the fields with a brush drag, made by fastening the ends of limbs or bushes in holes made in a rail or a piece of 4-by-4-inch timber, might also prove beneficial. These two practicable measures are all that can be advised with any encouragement at present for general relief from the ravages of this insect. In the case of small isolated fields, however, it is possible that some benefit might be derived from dusting with slaked lime at a time when the pest is clustered on the leaves."



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MAY 15, 1907.

Official Paper of the Illinois Grain Dealers' Association.

A CO-OPERATIVE FAILURE.

The failure of the Kansas Co-operative Shipping Association, explained in another place, is complete except that when its affairs are finally liquidated there will be some salvage, now estimated at 40 per cent, for disbursement to the shareholders.

The failure, as frankly explained by Manager Engelhard, was due to entirely natural causes—it was simply another of the innumerable business fatalities due to inexperience and the ignorance of its managers of technical details of business. Organized by men who had no business experience in grain, as a means of catering to an artificial class antagonism created and fostered by demagogues, the business as a business had to run itself. For a time it made money, as all such associations made money, when the tide of trade ran in easy and pleasant channels; but at the first sound of breakers ahead there was no one at the helm of its affairs with sufficient knowledge of the channel or business judgment to protect the concern, and it smashed on the rocks of a manipulated market and inability to ship grain during a car famine.

Now these are but some of the difficulties and risks that regular grain dealers are compelled to face daily in the conduct of their business; and it is a sufficient comment on American business skill, American methods and American commercial fairness, especially among the individual dealers in the country, who come in direct contact with the farmers, that American grain is probably marketed with less cost to the producer than that of any other nation on earth. But because farmers prefer to listen to talking strangers rather than deal, as man to man, with their neighbors, about every so often they must

pay their good hard cash to agitators to learn the above truth. The next expensive lesson of this sort farmers will have to absorb in the same way will be this: that of the so-called Society of Equity no more need be expected than of the Kansas Co-operative Shipping Association.

CHICAGO ELEVATOR REPORT.

The report of the Chicago Board of Trade's special committee on public elevators, the salient portions of which are reprinted on pages 577-578, discloses an abnormal situation in this city. It is substantially this: In the event of the present public-private elevator concerns going out of business as public elevators on and after January 1, 1908, as they now unite in saying they desire to do, there will be, practically speaking, but one public elevator (the Santa Fe, 1,400,000 bushels' storage capacity) left in what is the greatest concentrating and speculative grain market on earth. In other words, owing to the railway policy of turning their grain business individually over to private companies, Chicago, like other similar markets, has come face to face with the question whether the commercial machinery of these great grain markets shall continue to exist for the benefit of a few individual companies or for the public; that is, the producers and consumers of grain. This outcome of a system of favoritism by the carriers has long been apprehended by thoughtful observers; it is now here in acute form.

The problem is not an easy one to solve; and the report seems of opinion that the solution must come through the railways, which, in fact, have been instrumental in creating the anomalous situation. The ideal system needed is the duplication of the admirable Santa Fe system by all of the roads entering Chicago. That the roads, under the laws, are required to provide unloading facilities is conceded; but their duty to provide grain storage is not so clear; indeed, it is likely, if the Munn decision still obtains, they would not be permitted as carriers to do so. But the circumlocution of the Santa Fe's solution is both practicable and legal for all the roads; and its speedy adoption by the other roads would relieve the situation at once. Upon the committee appointed on the recommendation of the report will fall the duty of bringing the carriers generally to the adoption of the Santa Fe policy—preferably by moral suasion.

THE LEGISLATIVE NUISANCE.

If ever state lines are obliterated in this country and legislative power concentrated at Washington, it will be because the people will have become tired to satiation of the follies of 45 or more state legislatures filled with cheap men trying to make laws regulating commercial functions of whose nature and operation they are profoundly ignorant. The legislative season, now happily drawing to its close, has seen many attacks upon the grain exchanges, which threaten much disturbance to the natural flow of commerce in the great staple food-stuffs, that never would be heard of were legislators really aware of the effect of their proposed laws. Were they educated to look

far enough to see where the incidence of a tax falls they would no more think of taxing grain transactions on 'change (as is now done in Missouri and Minnesota) than they would of levying the same tax on sales of butter and eggs, hogs, cattle or any other product of the farm. Yet the effect upon the farmer is substantially the same, although in the one case he can't see how it hits him and in the second he can. Now this sort of thing is going on in other lines of trade and commerce; and will go on until the people realize what the cheap legislatures are doing to them, and either kick them all into the rubbish heap, or else dump the whole job of legislation on Congress, and "trust in God" that it will be no worse than it is.

CORN FROM THE GULF.

Consul Hamm, in his zeal to "point a moral," like the wise men of Gotham, has gone to sea in a bowl for his facts; wherefore his strictures on the corn in the Cynthia from New Orleans (which, by the way, was an abnormally long time at sea—a fact not noted by Consul Hamm) and the practice, in general, of shipping corn abroad via the Gulf ports is, to put it plainly, "belated nonsense." Corn shipped from the Gulf ports is not, as Consul Hamm states, "more apt to become heated than if shipped from the north Atlantic ports." On the contrary, corn from the Gulf has on the whole been selling at a premium as compared with north Atlantic corn, the Cynthia's cargo being the first exception to this rule recorded for some time. In fact, Consul Hamm's argument is entirely ad ignorantiam and is one revived after twenty-five years of experience at direct variance with Consul Hamm's assumed state of facts.

THE ALLOWANCES CASE.

The Commerce Commission's opinion in the Peavey case, referred to elsewhere, repeats the former opinion in so far as it holds that the allowances by railroads for elevation, or unloading, of grain are legal. The unloading and transfer being a service the roads are bound to perform, the carriers may perform this service themselves directly or they may employ an elevator or elevators to do it for them and pay cash for the services rendered. The new feature of the case is the declaration that the contract price for elevation, paid by the U. P. Ry. to the Omaha Elevator Co., $1\frac{1}{4}$ c per cwt., is too much, and being too much it amounts to a rebate to the extent by which that amount exceeds the actual cost of elevation, which in this case, the Commission declares, costs but $\frac{3}{4}$ c per cwt.; wherefore the order directing a reduction of the amount from $1\frac{1}{4}$ c to $\frac{3}{4}$ c per cwt.

This is really quite as much a concession as one had reason to expect under the circumstances, as the fundamental point at issue—the right of the carriers to employ others to render the service for them—appeared at all times to be impregnable. And yet, as the Commission said in concluding their original opinion, in practice the system is objectionable. Of that there can be no doubt, for as between competing patrons the carriers should be absolutely im-

partial; but a strict impartiality never can be attained until the carriers cease to employ elevator owners who are also grain dealers to render the elevation service; because only by some specious subterfuge can they disguise from themselves the truth that it is grossly unfair to put one's competitor's business secrets and the handling of his grain into the possession of his rivals. *Prima facie*, then, no railroad that continues to hire an elevator doing also a private business to do its transfer business for the general public can be said to be doing a "square deal" business as regards the general public.

THE TROLLEY ROUTE.

Our good friend, Thomas P. Riddle of Fort Wayne, sends us an interesting photograph, reproduced on another page. The accompanying text tells a remarkable story of carrier's neglect, for which it would seem there can be no palliation. That a regular shipper at any regular station, no matter how insignificant, should be compelled to wait five months and then not have filled his order for a car, is beyond any justification or excuse.

We don't know that any excuse was offered; but it is not surprising under the circumstances that Mr. Riddle should extend both hands of welcome to the electric interurban railways. Doubtless there are others who will join in this welcome relief of a situation that has become intolerable and which at this moment would seem to find its solution in some locations in no other way.

And yet the trolley promises its complications, so far as country buyers and shippers of hay and grain are interested. The trolley lines mean transportation intime, as the French would say; they go to the back yards of all the farmers on their routes or adjacent thereto; and assuredly, sooner or later, the trolley freight cars will handle commodities that now come to town by wagon. The trolley, then, is now expressing itself in terms that Mr. Riddle has brought to our attention; it may, and probably will, go to the logical limit, when it will become a problem that country dealers should prepare themselves to meet.

NEBRASKA REVIVING.

It is with a good deal of satisfaction that we note the reorganization of local associations of grain dealers in Nebraska. In these times it is impossible for business men in any given line of trade or commerce to "go it alone." To do so means to be ridden down and trampled upon by every other interest with which individuals in trade come in contact. The Nebraska state association was never an illegitimate body; only a statutory perversion of ethics made it appear so; and its dissolution was the more to be regretted since the parties who suffered most by the abandonment of its influences—the country dealers—were those who were rather the victims, in part, of any objectionable practices alleged to have been customary by some of its members and which caused its destruction. But local dealers, now, who must be organized for the legitimate protection of the trade in matters of transportation, and to meet other trade emer-

gencies that will readily occur to the reader, should not be deterred by the experience of the state association in the past from the exercise of their legitimate rights to form trade organizations for lawful purposes.

THE VALUE OF SCARCITY.

The Commercial West, which evolves an undue proportion of queer economic notions, now suggests that our surplus wheat is "undesirable," in view of its effect on prices, and that another good crop on top of it would be in the nature of a calamity. Current speculative conditions don't seem to conform to this selfish dictum. However, high prices are by no means as desirable *per se* as certain economists seem to believe, and certainly one can hardly understand how a short crop could at any time be a good thing for grain dealers who make their money on the volume of the crop and not its price. Brisk trade in consumable commodities is promoted by cheapness rather than by dearness, and mankind grows rich through plenty and not scarcity. Speaking of export trade, that country is in the happiest condition to command business which is in position to make prices that are a little lower than its competitors are able to offer and still make a profit. Domestically speaking, our working people of all classes are benefited by low rather than high prices, especially of foods; and the man who is praying for high prices simply to have them high is no friend to the poor or to trade in general.

THE NEW ORLEANS PROPOSALS.

In view of continued foreign complaints of the condition on arrival of American grain sold on "certificate final" terms, the New Orleans Board of Trade has presented a plan (see page 579) to bring about a reform in American methods of export certification of grade.

The New Orleans proposals are not, as may occur to friends of the proposals of the Uniform Grades Congress, in conflict with the purposes of the latter body; but, rather, they are supplemental thereto. It will avail little if the ex-ports adopt uniform phraseology for the export grades of grain if the inspection itself does not conform in letter and spirit to those descriptions. And there must be some final authority with power to put a check on cupidity by enforcing uniformity in the practical inspection or else the whole scheme of reform falls to the ground; for in the competition of the ports for business, it is the favors shown to the exporters by the port authorities rather than strict justice and fairness to the foreign buyer that brings business to the port; hence the natural and inevitable tendency to give the foreign buyer the worst of the deal. It is this condition that is at the bottom of the foreign complaints; and unless that condition is corrected, it is only a question of time until our grain exports will consist of only such parcels as foreigners cannot buy elsewhere. Indeed, we have practically arrived at that state of affairs now.

The New Orleans proposals are proper ones. They constitute in a way a test of good faith on the part of the out-ports and their willingness to "tote fair" as between themselves and

between the exporters and our foreign patrons. If the proposals fail to meet with proper response from the addresses it may be accepted as an indication that only federal inspection of export grain, on the basis of Government standards, can be relied on to restore to our foreign trade its natural safeguards.

ILLINOIS CANAL.

The old Illinois and Michigan Canal, which has received more hard knocks at the hands of the alleged friends of Illinois waterways—the Chicago daily newspapers—than any waterway in this country, is, it may be surprising to many to know, in fine physical condition to do business. And what is more, thanks to the Hepburn act, it is otherwise in condition to do business again with a profit to the boatmen. It is true, there are but few boats any more, and still fewer elevators on the canal, the through rate policy of the Rock Island and Santa Fe roads having in the past made it impossible to do a carrying business on the canal, and driven both boats and elevators from the canal; but there are probably enough boats afloat now to make the canal again an arbiter of rates in canal territory.

As remarked before in these columns, the talk about "a deep waterway" through Illinois, for which there is really no demand except from engineers and contractors who want to construct it, has obscured the real need of Illinois, which is the enlargement of the locks of the old I. & M. Canal to the size of those of the Hennepin Canal, running from Rock Island on the Mississippi to Hennepin on the Illinois, so that a boat of the maximum size that may be floated on the Hennepin Canal, now nearly ready to use, can go through with unbroken cargo to and from Chicago on a continuous water route from the Mississippi to the lakes. But of this much needed work, of course, there is now no demand made whatever, even from the towns and shippers most directly interested—those in Hennepin Canal territory. When will that territory wake up to its interests?

TARIFF WAR WITH FRANCE?

France has joined Germany, so to speak, in a protest against our existing tariff laws, and has already begun an attack upon our trade by a slap at Porto Rican coffees and also at our meats. There are also indications of a purpose to increase the already high duties on American grain and grain products, which will be prohibitive where now they are nearly so. As our Senate has studiously ignored for years the reciprocity treaty negotiated with France during President McKinley's administration, it should not be a matter of surprise to the public—since it appears our Government has negotiated a tentative treaty with Germany—if France should insist on a revision of tariff realtions with herself as the price of trade peace between the United States and France. Indeed, the complications over the tariff and the studied contempt of our Senate for the unratified treaty threaten even now a good deal of trade disturbance between the two countries.

Editorial Mention.

Galveston has adopted the Uniform Grades Congress rules and publishes them as in effect June 1.

Convention season now due. Read the list of "postings" in another column, and arrange your date calendar to fit.

The *Globe* ("Pv.") Elevator described this month is the latest type of the fireproof elevator; and as such is a most interesting study.

"Owing to depression of Eastern stocks," the Gibson Stock & Grain Co. at Salt Lake City, shut down recently. The papers say the unfortunate gang was able to retire winner of only a paltry \$250,000.

With Harroun paroled and McReynolds still dodging punishment for his delinquencies, it would appear as though in the grain business the law hits only the low spots, not the peaks—at least not very hard.

Dealers are reminded every little while, by judgments, that the state laws protect landlords by making the grain dealer liable for the grain sold feloniously by the tenant. Most states now are very severe on the tenant; but as in making a rabbit stew one has first to catch the runaway.

The Cincinnati Price Current's "Statistical Annual for 1907" is now ready and may be obtained for 25 cents by addressing that publication. It is quite unnecessary to say more of the "Annual" than to note its appearance; it has been known as an authority too many years to need praise at this time.

The building season in the Canadian West, unless crop conditions should soon prove decidedly unfavorable, will be a busy one, and plans have been made for perhaps hundreds of elevators in that country, aside from the 120 "wind-breaks" projected on paper by the so-called Society of Equity.

The Western Elevating Association at Buffalo has been reformed for 1907, but owing to the Hepburn act, and the verdicts against the association in the cases of the collapsed Ontario elevator (\$56,750 damages for losses on grain) and the Spencer Kellogg discrimination, some of the acts of the association are not likely to be so peppery as in the past.

There is probably sufficient law in Illinois to smash the bucket-shop wherever the authorities wish to smash it; but for all that the action of the Illinois House in killing the Pierson bill to prohibit the shop in positive terms was nothing less than a disgrace. One need not refer to the rumors that a slush fund had its influence upon this result. It is enough that some members of the House are simply insane in their attitude toward the grain exchanges, so that the plea that apparently killed

this bill—that it was an effort to give the Board of Trade a monopoly—was sufficient. When will the voters of Illinois insist upon choosing as their legislators men who will not disgrace them by the density of their ignorance as well as by other delinquencies?

Secretary Wilson on May 7 assured the expectant public that although "seeding is a little backward" there is still plenty of time to grow a crop, and so on in the Wilsonian manner. Then the public immediately began to copper the tip, and business on the Chicago Board has been booming—"just like old times." It's a great man who does this stunt both ways and keeps everybody good natured.

A bill before the late Minnesota legislature legalized the sale of "purified" barley and oats when offered for sale so designated. This conforms to the practice of the Chicago Board of Trade, and is entirely within the natural rights of man as well as conforms to the spirit of the pure food laws. Such a law is particularly needed in Minnesota, in view of its importance as a barley state.

Two different bills were enacted by the Illinois legislature at the urging of the American Bar Association, the object of which is to make the Illinois laws respecting dealings in commercial paper and the form and character of storage warehouse receipts uniform with those of thirty other states which have the same laws. These are at least two bills of conspicuous merit passed at Springfield at this session.

A North Dakota paper says the testimony before the Commerce Commission that the "elevator companies raise the grade of poor grain by mixing proves that the farmers of the Northwest have been robbed of hundreds of dollars each year." Isn't it rather the truth that the farmers rob themselves—first, by giving the screenings to the elevator men and then by paying the freight to deliver them?

Minneapolis grain firms are sending out warnings to the farmers of the Northwest to "beware of mixing the different kinds of grain during the seeding season. The mixing of a small percentage of durum wheat with the fife or blue stem has caused serious losses to many farmers through the difference of grade." But how about it when it goes out of the elevator to the Eastern or foreign miller? Is that different?

The rebate cases in Minnesota were really fought, legally speaking, on the pleadings, and the defendants were beaten. The W. P. Devereaux Company of Minneapolis, therefore, entered a plea of guilty to the indictment against it, and accepted a fine of \$1,000 for "soliciting and accepting rebates" on grain handled from Minneapolis to Seattle. The Devereaux Company must not be judged too harshly—they simply took what the roads had been in the habit of giving to all other big shippers and receivers but would not give the small men—such was the "custom of the country." This and other

fines for the offense named is, however, likely to put an end to the whole contemptible business, and no doubt the Devereaux Company, like the rest, will feel themselves more respectable as business men when they stand on an equality with their competitors, knowing that they will themselves receive the same treatment meted out to others and be again looked upon as honorable competitors—gentlemen among gentlemen.

An Illinois dealer who viewed the destruction of his elevator and its contents by fire with some equanimity, believing he was fully insured, found on examination of his papers that of \$4,800 insurance carried \$1,000 was tornado, \$800 was on grain (of which there was little in store), and a certain amount was on office and scales (not destroyed), while the rest had lapsed. There is only one moral to the story: Do you, Mr. Reader, know the conditions of your own policies? If not, why not?

The scarcity of farm labor, should it continue, may adversely affect the quantity of grain raised in sections where dairy farming is likely to prove profitable. It is true that labor on a dairy farm is of the most exacting and unceasing kind—a veritable treadmill; but the production of a successful milking machine has removed the true bête noir of that industry and thereby commended it to many farmers who otherwise would never have seriously considered it as within the range of practicability. Even parts of Kansas have begun to talk of abandoning grain for the dairy.

After a long and sharp contest in which at last the Senate overpowered the House, the Nebraska "independent" grain men have been saved from their own folly. They insisted upon a law requiring the railways to weigh their grain on track scales, and, of course, the House consented to a fallacy that might have cost shippers incalculable sums through bad weights; but the Senate refused to concur in the provision. The Senate also refused to approve the House bill requiring grain men in Nebraska to file daily a statement of grain prices paid—a harmless but also impotent notion of some half-educated legislator out "trust hunting."

The U. S. Circuit Court of Appeals at Kansas City on April 29 decided a rebate case of high importance, involving export and import rates, which will put a stop to manipulation of rates by that "device." The court holds, in the first place, that the giving and receiving of a rebate is a continuous crime of which any court having jurisdiction of crimes in the district through which the transportation is conducted may take cognizance; second, that inland rates on exports and imports must be filed, whether made as an aggregate or joint through rate, and may not be departed from; third, that any "device" by which the rate is rebated is an offense under the Elkins act; and, fourth, that a contracted rate cannot continue after a higher rate has been filed and published. We believe this decision—the first time the status of im-

port and export through rates has been determined—finally puts a stopper at least on all the old devices by which export traffic men have been enabled to manipulate rates to secure rebates or special concessions.

President Finley of the Southern Railway said recently that "the idea that railroad rates are controlled by capitalization is entirely without justification. Capitalization may affect the intrinsic value of a railroad company's securities and thus affect the investing public. It cannot control a carrier's rates, and hence cannot affect the shipping public." Which is true enough—until a legislative attempt is made to reduce rates; then the courts hold it confiscation to make rates that are not remunerative on the basis of capitalization and bonded indebtedness. The effort to set aside the 2-cent passenger rate in Indiana is based on this claim of confiscation.

The grain drier is a great conserver and protector of new corn; but there should be a school for operators and driers, both in conditioning dried corn and in the use of the moisture tester. The drier will dry corn all right, but care is needed as much in thoroughly cooling corn after drying as in drying it, or the good effects of the drying may be lost. Some operators, too, seem to guess at the amount of moisture in corn both before and after cooling; we have it on the very best of authority that corn said to have gone through a drier has been found recently by actual measurement to contain nearly 20 per cent of moisture, on arrival at destination.

This paper has never felt itself justified in working the familiar "missing word" fake that used to be a common stunt of many newspapers; but our proofreader, in the April number, led us into one that was very amusing (if the gentleman referred to will kindly look at the matter in that light), as will be seen by reading the following brief editorial as we had intended it to read, the missing word being enclosed in brackets []:

Alfred Anderson, who for the past fourteen years has been grain inspector at Peoria, has been invited to take the place of chief inspector at Buffalo, and has accepted, beginning his duty on April 1. Mr. Anderson ranks as one of the very best grain inspectors in the country. He is resourceful, knows grain perfectly, is honest and capable, and Buffalo is as fortunate to get him as Peoria is [reluctant] to lose him.

In connection with the action against the Superior Board of Trade by the Minneapolis Chamber of Commerce to prevent the former's using the latter's grain quotations, the whole truth of the miserable pretense of legitimacy of the Superior body came out in an official way. It has been known for years that the Superior body has been none other than a shelter for a gang of bucket-shoppers, and for that reason it is amazing that so respectable and important a body as the North Dakota Bankers' Association could be so taken in by that kind of men. It was shown that Edwards-Wood (who made large fortunes in

a few years and then turned over their snap to the Wisconsin Grain and Stock Co.) hired men to make fake trades in grain—"would offer to buy or sell 10,000 bushels of wheat and then laugh"—and send the prices out into the country as "market quotations" with which to play the country "speculators"; and yet were able to "pull the wool over the eyes" of Mr. Macfaddan and his fellow bankers, and convince them that such a miserable farce wore the crown of respectability, while the regular exchanges of Minnesota were the real scoundrels. As Puck said, "What fools these mortals be!"

The Wisconsin Grain Commission is going to find out, if it can, whether the railways at Superior can lawfully lease their elevators and turn them into private houses at will, closed to the public. It is a praiseworthy task and one that ought to be judicially determined as soon as possible. In going at this task, however, the interests of the Superior Board of Trade, which is simply an aggregation of bucket-shop gamblers, should be carefully differentiated from the real merits of the question. One cannot be sure that the Wisconsin Commission will do this. The members and their friends seem to be singularly obtuse in regard to this Superior scandal, amounting to a downright perversion of judgment unfitting men to approach their official duty in the premises in a proper state of mind.

The Winnipeg Grain Exchange has restored the Grain Growers' Grain Company to membership and changed its rules to fit the necessities of that case. This was a case of discretion, as it is rather more than likely continued obstruction of the company would have resulted in serious legislative interference with the Exchange. The trouble in western Canada is the dominance of the line elevator company, which as the years go by will increase; and the leasing of the railway elevators to private companies, which, in the present state of public opinion, is one of the biggest mistakes that could have been made by the railways, is sure to result in continued friction between both producers and consumers of Canadian grain and the independent dealers not favored by railways unless the methods of the Grain Exchange can be utilized to prevent it.

The Minnesota legislative committee appointed to inquire into the operations of the Minneapolis and Duluth grain exchanges and their effect on farmers' interests reported, as only a sensible body of intelligent men could report, to-wit, that their influence is highly beneficial to the producers and consumers of grain. Pestiferous demagogues and badly informed agitators either cannot or will not understand that the commissions paid by the farmer to members of the exchanges is not for the "privilege" of selling grain there, but for the service of actually selling grain for them—finding for the farmer a cash customer instantly, and getting for him the highest market price, and guaranteeing him spot cash for his stuff. At the same time this commis-

sion fee provides a place for the consumer to buy, assured that what he contracts to buy he will receive and at the time he expects delivery. Further, the competition on the floor being free makes prices which the machinery of the exchange circulates all over the world. The exchanges also see that storage is provided for grain; that the money and credits for handling a crop of any size are available; that railroad rates and service are adequate—in short, were it not for the grain exchanges it would be practically impossible for a farmer in these days to dispose of his grain at all, except at great expense, at any point where there did not exist a mill to consume it. And all this service is rendered for 1 cent a bushel commission; and still there are kickers!

King & Co., Toledo, sums up the Gates career in the following succinct manner:

Chicago papers to-day say he will retire from stock market. He is not broke, but has suffered great reverses. He dropped several million two years ago, trying to corner May wheat in April. Rich man's panic in Wall Street put a recent puncture into his pile. We regret it. He was a liberal trader;

which is optimistic in view of the Inter-Ocean's quotation of Mr. Gates' ideal of the ethics of market operations, to wit:

"Life is a gamble," he said. "Everything is a gamble. When the farmer plants his corn he is gambling. He is practically betting that the weather conditions will enable him to raise a good crop. Sometimes he loses. Sometimes he wins. Every man who goes into business embarks upon speculation. Of course, the element of judgment enters in, but the element of chance cannot be ruled out. Whenever a man starts out on a railway journey it's a gamble whether he ever reaches his destination. All life is a gamble, you see."

Not a very high ideal of life nor a very clear one of human motives. Planting is not a gamble, nor is speculation, however it may seem to Mr. Gates, who by rights should go to Asia and confess himself a fatalist among fatalists, and be done with it.

Carr, the whilom "farmers' friend," who had become somewhat obscured by the lime-light flashed by the syndicate of co-operative promoters, has turned to defend the Chicago weighing department. He says he quotes verbatim "from the printed attack of Illinois grain buyers" (not named or indicated in any way), who say that:

The farmer who loads a car of grain seldom weighs it. If the weight at Chicago is short 500, 1,000 or 1,500 pounds, the farmer who has not weighed does not know the extent of the shortage. If the car he has loaded is leaking when it arrives at Chicago, it may and may not be reported to him. In either case he does not know how much grain has been lost.

Carr calls this a cowardly attack. It is, whoever makes it, for it is not a true statement of facts. Whatever may be said of the expediency of a farmer shipping his own grain, he gets full weight or notice of the true condition of his car on arrival at Chicago. However, the said Illinois "grain dealers" may have felt justified in their stab at this market in view of the manner in which the traveling men of "syndicated commission houses" promoting farmers' companies libel the commission men of this market in their speeches in Iowa and elsewhere.

TRADE NOTES

Gill & Fisher, grain receivers and exporters, Baltimore, Md., recently shipped the first full cargo of Hess-dried corn that ever left that port. The shipment consisted of 116,000 bushels and was consigned to Sligo.

S. K. Humphrey of Boston, Mass., reports recent sales of Humphrey Employe's Elevators to the Tennessee Milling Co., Estill Springs, Tenn.; the Aulne Milling Co., Aulne, Kan., and the Wellington Milling and Elevator Co., Wellington, Kan.

The Minneapolis Steel and Machinery Co. has opened an office at 262 Commerce Street, Dallas, Texas, under the management of J. P. Greenwood. The large demand for Twin City Corliss Engines and Munzel Gas Producer Engines has made it necessary to have an office in this territory to care for increasing business.

In their new steel shop the Stephens-Adamson Mfg. Co. of Aurora, Ill., have equipment for taking orders for anything made in steel to go in an elevator outfit. Their facilities have been largely increased in all departments, new and modern tools have been added, and they invite specifications for any kind of steel work.

One of the attractions at the recent meeting of Ohio millers at Dayton was a model of the Richardson Automatic Grain Scale, shown in a room adjoining the convention hall by Representative Charles Beatley. Plans were also shown of the company's new Richardson Automatic Weigher and Flour Packer, recently placed on the market.

Olson Brothers & Co., elevator builders and manufacturers of elevators and conveying machinery, of Chicago, have just removed from their old location at 160-162 Sangamon Street to their new building at 703-707 Bloomingdale Avenue, when they will be better equipped than ever to take care of every branch of their work.

A handsome lithograph, 11x14 inches in size, showing the Monarch Cornmeal and Feed Mill, has been received from Sprout, Waldron & Co. of Muncy, Pa. This mill is equipped with genuine French burrs and is made in eleven styles and sizes. It is suitable for elevators where high-grade meal and feed is made. Copies of the lithograph will be sent free on request.

The catalogue of the Avery Scale Co., North Milwaukee, Wis., shows the details of construction of the Avery Scale and also contains illustrations from photographs showing the different types of scales installed for different purposes. This scale is in use in some of the largest grain-handling plants abroad and is easily adapted to existing conditions in the elevator or warehouse. The catalogue is sent upon request to all who are interested in weighing grain and similar substances.

The Minneapolis Steel & Machinery Co., Minneapolis, Minn., has issued Brochure No. 101, which is devoted to a brief, forceful talk on the Twin City Corliss Engine. This booklet is the advance agent for the complete catalogue on the Twin City Corliss Engine, which will be published later. Details of construction of the engine are illustrated and described and the power user will find the brochure interesting and instructive. The company will be glad to send a copy to anyone who will make application for it.

The Joseph Dixon Crucible Co., Jersey City, N. J., is favoring friends and customers with a wall calendar showing a lithographed reproduction of the City Investing Building, now in course of construction in New York City. This structure will be one of the tallest, if not the tallest, buildings ever erected. The structural steel work above the street level is being protected from corrosion with Dixon's Silica Graphite Paint. This is the paint that is recommended for all outside

painting, and its use on this new structure indicates that the leading builders are alive to its merits.

The Minneapolis office of Sprout, Waldron & Co. is now located at No. 7 Corn Exchange Building, having been removed from Nos. 22, 28 and 30.

THE ILLINOIS GRAIN DEALERS' ASSOCIATION AT CHICAGO.

The annual meeting of the Illinois Grain Dealers' Association at Chicago, Ill., on June 11 and 12 now bids fair to break all records for attendance. The Central Passenger Association has granted a rate of a fare and one-third for the round trip on the certificate plan for all points in the state of Illinois and St. Louis, Mo., and while Secretary Strong has not yet completed his program so that it can be published in full in this issue, it will be made up of matters of interest to everyone.

The following committee on entertainment has been appointed from the committee which was appointed to represent the Chicago Board of Trade: G. B. Van Ness, chairman, Walter Fitch, George E. Marcy, James Pettit, D. A. Noyes, A. J. White, P. H. Schiffelin, E. L. Merritt, Sam C. Scotten, H. A. Foss. This committee is arranging to take care of the dealers on the afternoon and evening of the second day of the meeting. It is proposed to go by automobiles to Fort Sheridan and inspect the barracks and witness the sunset drill. From thence to Ravinia Park, one of the most popular attractions on the North Shore, where supper will be served and the evening spent in listening to the band concert. A special train will conduct the party to the city. While this program of entertainment has not been definitely determined upon, it is assured that the visitors will be entertained right royally during their stay in some manner or other, and the invitation is extended to every member of the Illinois Association to come to Chicago on the convention date.

EXCHANGE APPROVED.

During its late session the Minnesota legislature, at the instance of an up-state farmer, appointed a committee to investigate the conduct of the business of the public grain exchanges of that state. This committee on April 26 made its report by Senator Calhoun, chairman. In substance the report says:

These organizations have as their object the furnishing of facilities to their members and surrounding these members with various safe methods and establishing rules governing business transactions, having systematized the business so that people can market volumes of grain readily and convert it into money with less friction and expense than ever before, and in consequence the development of the grain business has been materially helped by the exchanges, which have been one of the causes which have developed the whole Northwest.

The competition in these exchanges is open and keen. The membership includes millers, elevator owners, grain commission merchants, linseed oil manufacturers, bankers, cereal manufacturers, etc., many members of each exchange residing at other points than the terminal markets. The competition is so open, the interests represented so varied, rules making transactions so certain and so high a standard of business integrity maintained by each exchange that it seems to this committee that the result of the existence and work of these exchanges has a very small possibility of being hostile to the best interests of the grain producers in this state.

It appears clearly that while among some of our best citizens there is a prevalent contention that the grain market is, in a sense, controlled by these two exchanges, yet it is evident that the reason for such opinion is based upon the fact that these exchanges gather together the buyers and sellers of all grains, and that therefore anyone having grain to sell naturally goes to these exchanges simply because, if for no other reason, that all buyers and sellers of grain are in the market. It is a matter of convenience as well as expedition for either to be members. Unless transactions are very large the interest on investment of a membership and various expenses of business being considered, there is a very slight difference as to costs of transactions between being members and non-members. By

virtue of the high standard of business integrity maintained, the farmer and shipper can, to a very great degree of safety, rely upon the honesty of such commission merchants with whom he does business.

The committee notes further that commission men not only act as grain receivers but advance money to shippers in advance of shipments, it appearing that at certain times of the year as much as \$10,000,000 or \$12,000,000 is loaned by these commission merchants of the two grain exchanges to grain dealers at country points, it being impossible for the latter to get the assistance from banks. The commission merchants, therefore, to a large degree, sustain country grain dealers financially. Testimony of bankers before the committee shows that the grain dealers so hedge their deals that at no time are they speculating or affected by market fluctuations.

It appears that the Minnesota Chamber of Commerce spends between \$30,000 and \$40,000 a year in distributing valuable market information to its members, and that its business has grown from 17,000,000 bushels in 1881 to 130,000,000 bushels in 1906, and the Duluth Board of Trade's volume has increased from 3,500,000 in 1881 to 80,000,000 in 1906.

The committee believes, in regard to admission of members, that the methods of election of applicants should be so broadened and enlarged that it should be dependent on a vote of a larger proportion of the membership than now, so that the question of refusing or receiving an applicant would be passed on by a larger number of members than under the present system. The committee also suggests the wisdom of the exchanges enlarging their membership limit so that memberships could be more readily purchased by any possible applicant.

[For the "American Elevator and Grain Trade."] WANTED—A REMEDY FOR HOT CORN.

BY L. C. BREED.

The present season is said to be the worst in many years with regard to the quality of corn, and complaint on this score is not confined to any section of the country, but is general. Markets which possess drying facilities are, of course, aided to some extent in combatting this evil and in case of large centers, like St. Louis for instance, the losses sustained this season would seem to have been sufficiently impressive to demonstrate the need of such facilities, especially as this market is steadily gaining ground in the volume of its receipts of corn.

At various times during at least a quarter of a century, the writer has cudgeled his brain and interviewed the trade to devise some way to overcome the danger of corn heating in transit. Visions of letters patent issued by Uncle Samuel's patent office were occasionally apparently about to be found to be based on a practicable plan, but in each case the idea proved to be n. g. Nearly all of these schemes contemplated the adoption by the railroads of a car designed to carry bulk corn. Others were aimed at the farmer who should be induced to shell and dry his corn.

There are objections to kiln-dried corn. Of course there is a heavy shrinkage in weight, but in addition it makes the corn brittle and injures its flavor. [Q. E. D.—Editor.]

To the man who can successfully solve this problem and secure to himself the benefit of his genius, a reward passing computation would undoubtedly be realized, since every year at the beginning of the season and later on when the germinating period is reached, especially in case of shipping to the South, trouble is always experienced from hot corn, and besides being the occasion of ill-feeling, usually results in loss to some one.

The Farmers' Elevator Co. of Blooming Prairie, Minn., recently issued a stock dividend of 40 per cent in lieu of cash.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of April, 1907:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

| Articles. | Receipts. | | Shipments. | |
|--------------------|-----------|-----------|------------|-----------|
| | 1907. | 1906. | 1907. | 1906. |
| Wheat, bushels. | 195,889 | 136,726 | 204,988 | 24,000 |
| Corn, bushels. | 2,212,263 | 1,677,590 | 2,729,235 | 2,714,573 |
| Oats, bushels. | 418,539 | 374,272 | 350 | 260,767 |
| Barley, bushels. | 15,907 | ..... | ..... | 7,341 |
| Malt, lbs. | ..... | ..... | ..... | ..... |
| Rye, bushels. | 66,882 | 51,878 | ..... | 55,714 |
| Timothy Seed, lbs. | 15 | ..... | ..... | ..... |
| Clover Seed, lbs. | 9,452 | 4,449 | 3,469 | 1,998 |
| Hay, tons. | 207,999 | 192,854 | 117,097 | 95,725 |
| Flour, bbls. | ..... | ..... | ..... | ..... |
| Mill feed, tons. | ..... | ..... | ..... | ..... |

BOSTON—Reported by Daniel D. Morris, secretary of the Chamber of Commerce.

| Articles. | Receipts. | | Shipments. | |
|---------------------|-----------|---------|------------|---------|
| | 1907. | 1906. | 1907. | 1906. |
| Flour, bbls. | 184,217 | 111,489 | 70,651 | 43,975 |
| Wheat, bushels. | 1,058,399 | 382,940 | 881,538 | 626,210 |
| Corn, bushels. | 1,417,556 | 908,244 | 747,012 | 878,604 |
| Oats, bushels. | 455,091 | 587,938 | ..... | 245,400 |
| Rye, bushels. | 3,626 | ..... | ..... | ..... |
| Barley, bushels. | 2,730 | 91,041 | ..... | 81,451 |
| Flax Seed, bushels. | 550 | 59,900 | ..... | ..... |
| Mill Feed, tons. | 1,292 | 1,049 | 86 | 74 |
| Cornmeal, bbls. | 3,851 | 2,210 | 895 | 355 |
| Oatmeal, bbls. | 8,195 | 14,835 | 2,850 | 7,705 |
| Oatmeal, sacks. | 3,026 | 5,055 | 3,660 | 8,345 |
| Hay, tons. | 9,960 | 12,760 | 370 | 3,350 |

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

| Articles. | Receipts. | | Shipments. | |
|----------------------|-----------|-----------|------------|-------|
| | 1907. | 1906. | 1907. | 1906. |
| Wheat, bushels. | 2,372,720 | 5,056,928 | ..... | ..... |
| Corn, bushels. | 2,663,153 | 3,345,046 | ..... | ..... |
| Oats, bushels. | 2,007,123 | 2,977,160 | ..... | ..... |
| Barley, bushels. | 477,650 | 1,069,872 | ..... | ..... |
| Rye, bushels. | ..... | 130,000 | ..... | ..... |
| Timothy Seed, lbs. | ..... | ..... | ..... | ..... |
| Clover Seed, lbs. | ..... | ..... | ..... | ..... |
| Grass Seed, bushels. | ..... | ..... | ..... | ..... |
| Flax Seed, bushels. | 2,615,565 | ..... | ..... | ..... |
| Broom Corn, lbs. | ..... | ..... | ..... | ..... |
| Hay, tons. | 304,460 | 342,879 | ..... | ..... |

Canal did not open until May 1, 1907.

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

| Articles. | Receipts. | | Shipments. | |
|------------------------|-----------|-----------|------------|-----------|
| | 1907. | 1906. | 1907. | 1906. |
| Wheat, bushels. | 901,095 | 222,000 | 1,247,588 | 1,891,470 |
| Corn, bushels. | 7,979,002 | 4,146,244 | 8,962,592 | 8,812,424 |
| Oats, bushels. | 9,146,648 | 6,384,179 | 7,351,560 | 5,955,677 |
| Barley, bushels. | 1,707,939 | 1,236,769 | 602,053 | 532,239 |
| Rye, bushels. | 21,173 | 140,200 | 150,152 | 90,754 |
| Timothy Seed, lbs. | 2,165,195 | 2,193,459 | 1,572,069 | 1,325,808 |
| Clover Seed, lbs. | 175,800 | 465,562 | 400,025 | 171,076 |
| Other Grass Seed, lbs. | 1,297,615 | 1,023,633 | 3,519,829 | 2,758,541 |
| Flax Seed, bushels. | 114,669 | 123,400 | 8,064 | 1,821 |
| Broom Corn, lbs. | 1,144,766 | 537,917 | 760,606 | 437,132 |
| Hay, tons. | 23,371 | 13,886 | 4,658 | 2,751 |
| Flour, bbls. | 945,484 | 793,637 | 677,339 | 578,828 |

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

| Articles. | Receipts. | | Shipments. | |
|-------------------------|-----------|---------|------------|---------|
| | 1907. | 1906. | 1907. | 1906. |
| Wheat, bushels. | 206,950 | 241,818 | 216,038 | 206,814 |
| Corn, bushels. | 1,093,478 | 534,359 | 634,196 | 323,270 |
| Oats, bushels. | 864,650 | 340,032 | 303,632 | 251,263 |
| Barley, bushels. | 70,048 | 25,522 | 3,006 | 1,466 |
| Rye, bushels. | 68,060 | 30,164 | 19,668 | 14,822 |
| Malt, bushels. | ..... | ..... | ..... | ..... |
| Timothy Seed, bags. | 5,740 | 441 | 2,656 | 3,104 |
| Clover Seed, bags. | 2,176 | 1,646 | 4,231 | 3,042 |
| Other Grass Seed, bags. | 6,973 | 6,577 | 10,629 | 10,495 |
| Hay, tons. | 16,622 | 19,807 | 11,853 | 17,707 |
| Flour, bbls. | 138,096 | 124,016 | 113,838 | 80,490 |

CLEVELAND—Reported by M. A. Havens, secretary of the Chamber of Commerce.

| Articles. | Receipts. | | Shipments. | |
|---------------------|-----------|---------|------------|---------|
| | 1907. | 1906. | 1907. | 1906. |
| Wheat, bushels. | 137,540 | 70,232 | 48,360 | 42,437 |
| Corn, bushels. | 520,236 | 539,711 | 144,984 | 313,312 |
| Oats, bushels. | 598,311 | 558,257 | 99,399 | 230,995 |
| Barley, bushels. | 14,004 | 9,287 | 400 | 7,200 |
| Rye, bushels. | ..... | ..... | ..... | 2,685 |
| Flax Seed, bushels. | ..... | ..... | ..... | ..... |
| Do rail. | ..... | ..... | ..... | ..... |
| Hay, tons. | 4,806 | 4,665 | 968 | 644 |
| Flour, bbls. | 5,177 | 6,098 | 3,188 | 2,099 |

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

| Articles. | Receipts. | | Shipments. | |
|------------------|-----------|---------|------------|---------|
| | 1907. | 1906. | 1907. | 1906. |
| Wheat, bushels. | 143,565 | 90,333 | 22,10 | 11,941 |
| Corn, bushels. | 511,294 | 423,589 | 208,555 | 193,840 |
| Oats, bushels. | 313,533 | 140,432 | 14,852 | 4,214 |
| Barley, bushels. | 18,993 | 180,900 | ..... | ..... |
| Rye, bushels. | 15,613 | 1,943 | 9,284 | 41,278 |
| Flour, bbls. | 11,800 | 20,200 | 6,200 | 11,400 |

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade.

<table

ELEVATOR AND GRAIN NEWS

ILLINOIS.

The Chapin Grain Co. of Chapin, Ill., has dissolved.

J. E. Potter has sold out his grain business at Douglas, Ill.

The Brainerd Grain Company will erect a new grain elevator at Sicily, Ill.

John and Lester Marshall of Charter Grove, Ill., have purchased an elevator at Malta.

A new elevator is being built at Mayview, Ill., where it will replace the one recently burned.

F. A. Guenthner of Freeport, Ill., will build a 30,000-bushel grain elevator in Pearl City, at a cost of \$8,000.

P. S. Mahan of Palmyra, Ill., recently purchased the elevator at Hettick owned by Killan Bros. & Burrell.

The Farmers' Elevator Co. at Ferris, Ill., is a new corporation. George Abbott will have charge of the elevator.

It is announced that Theo. F. Boecker has withdrawn from the grain firm of B. B. Boecker & Son of Naperville, Ill.

It is planned by the American Hominy Co. to construct an elevator at Tuscola, Ill., which will have a capacity of 100,000 bushels.

Condon and Reimke of Pesotum, Ill., are building an addition 20x20x21 feet, to their elevator. This will increase the capacity about 7,000 bushels.

After having been completely remodeled the Rock Falls Elevator at Rock Falls, Ill., has resumed. A new dump and new conveyors have been installed.

Mr. Doyle has closed his elevator on the Burlington at Galesburg. It is asserted he is in a wrangle with the railroad whom he asks for a more suitable site.

Dow & King of Pittsfield, Ill., have just acquired the elevator at Hull. This gives them a complete line of elevators in an exclusive field from Fall Creek to Pittsfield.

E. E. Derrough, formerly of A. D. Derrough & Son, Champaign, Ill., has leased the plant of the Savoy Grain and Coal Co. at Savoy, Ill., and took possession May 1.

The S. W. Love Elevator Co. is a new firm at Urbana, Ill., which will soon erect a commodious elevator on the Wabash right-of-way. George Brownfield is manager for the house.

A Mr. Mundy of Farmersville, Ill., has bought the McRoberts Elevator at Curran. The new owner will tear it down and build an up-to-date structure complete in every detail for handling grain.

Articles of incorporation have been issued the Keith Elevator Co. of Chicago, Ill., which is capitalized at \$25,000. Walter W. Keith, Edson Keith, Jr., and James B. Wayman are the incorporators.

Twist Bros. will erect a grain elevator at Kincaid, Ill., and another at Vollentine, a new station near Taylorville. Both structures will be started at once.

Articles of incorporation have been granted the Glenavon Grain and Mercantile Co. of Glenavon, Ill. The firm is capitalized at \$8,000. Among those interested are T. A. Campbell, T. S. Steinke and O. S. Healea.

The Burrell Engineering & Construction Co. has the contract of W. Nashold of Monroe Center, Ill., for a 10,000-bushel elevator to be equipped with an 8-horse Fairbanks gasoline engine. It will be completed by June 1.

The 50,000-bushel transfer elevator at Madison, Ill., for the Miller Grain Co. is completed. It is equipped with three 30-horsepower alternating current Fairbanks motors, two stands of elevators, power shovels, car puller and two 1,000-bushel Fairbanks scales. It was built by the Burrell Engineering & Construction Co.

Late in April Horace L. Brand bought at referee's sale the McReynold's Elevator in Chicago. He paid \$52,150. It is said the elevator will be removed and the land placed on the market. It contains about 40,000 square feet. The elevator is an old-fashioned structure and is not adapted to modern uses. This elevator formerly belonged to George McReynolds. It is said that the Chicago & Northwestern Railroad offered \$250,000 for this property several years ago. It lies between Fif-

teenth street and the Northwestern tracks on the north and south and the Metropolitan elevated and Wood street on the east and west.

J. Ogden Armour has sold the Columbia Elevator and the land on which it stands in Chicago, Ill., to the Burlington Railway for the consideration of \$85,000. The property is on the canal and measures 200x234 feet. The elevator will eventually be removed and the land used for railroad purposes.

S. W. Strong, secretary of the Illinois Grain Dealers' Association announces the following changes: S. L. Hamilton of Ashland has sold to farmers; A. O. Anderson, succeeded by M. P. Harris at Lee; F. R. & M. A. Current succeeds A. L. Current at St. Joseph; Coon Bros. (mail Rantoul) succeed Wood & Wood at Ellis; Marshall Bros. succeed W. D. Blair at Malta; Larson & Gagham succeed Ed Gagham at Cortland; J. H. Frauver succeeds Frauver & West at Sabina; L. J. West succeeds B. F. Baker & Co. at Glenavon; E. & W. H. Janvin succeed J. C. Hamilton at Hernan; Mansfield & Co. succeed P. Schertz & Son at Monticello; Rich & Blankenbaker succeed Jacob D. Rich at Sidney; G. B. Carrico succeeds Dugger & Bangert at Womac.

IOWA.

A new grain elevator is going up at Miltonville, Iowa.

The new Brockway Elevator at Matlock, Iowa, is rapidly looming up.

Gitchell & Son have completed their new elevator at Alburnett, Iowa.

Charles Pfaff has sold his grain business at Buchanan, Iowa, to C. S. King.

Jacob Erickson has succeeded Erickson & Larson in the grain business at Roland, Iowa.

A farmers' elevator company will build at Wellsburg, Iowa, if a site can be secured.

Harry McComb will rebuild his elevator at De Sota, Iowa, which burned last summer.

It is possible the new Farmers' Elevator Co. at Rembrandt, Iowa, will buy the Skewis Elevator.

About \$3,000 has been raised by the farmers around Hansell, Iowa, towards a new elevator.

A. W. Swinton of Minnesota, Minn., has purchased Frank McGee's Elevator at Maynard, Iowa.

F. E. Smith of Tennis, Iowa, has acquired the elevator at Onawa, Iowa, from George H. Elliott & Son.

Work has started on the new Farmers' Elevator at Amelia, Iowa, which will be ready for business by July 1.

A farmers' co-operative elevator company has been organized at Graettinger, Iowa, to buy one of the old elevators.

Ware & Leland have acquired the Hammond Elevator Co.'s business at Reinbeck, Iowa. W. F. Fearer will remain as manager.

D. J. Peters has bought out his brother's, J. J. Peters, interest in the grain business at Grundy Center, Iowa, and now is sole owner.

Joe Auracher is remodeling his elevator at Summit, Iowa. A concrete bottom has been laid, a new engine and dump ordered and other improvements started.

The old Peavey Elevator at Doon, Iowa, which George Lewis has had charge of for several years, is being razed. The other two elevators in the town are being remodeled and enlarged.

Last month the Updike Grain Co. took possession of the elevator at Irwin, Iowa, purchased from Charles Esher, Jr., some time before. A Mr. Brown of Zearing, Neb., will act as manager.

F. H. Black is president of the newly formed Farmers' Elevator Co. at Spencer, Iowa. Other officers are W. R. Webb, vice-president; W. B. F. Killmar, secretary, and W. F. Torbert, treasurer.

Plans have been drawn by the Burrell Engineering & Construction Co. for a 15,000-bushel grain elevator to be erected at Sunbury, Iowa, for P. A. Reinbrecht. Work will be commenced May 15.

During the past month the Farmers' Co-operative Elevator Co. was incorporated at Union, Iowa, with a capitalization of \$10,000. Among those interested are W. H. Rogers, H. C. Chapin, C. J. Wilson, H. J. Benson and others.

During the past month the Wilton Elevator at Wilton, Iowa, owned by the Ott Estate, was sold to the Stockdale & Diltz Co. of Walcott, for \$6,200. R. J. McSwiggin has been installed as manager. This purchase gives the new owners a line of ten elevators.

It is reported that the Farmers' Elevator Co. of George, Iowa, has purchased the Rudloff Bros. elevator for the consideration of \$5,000. C. J. Locker now operates the only other elevator in the town. The Farmers' Elevator Co. made the purchase out of the profits of its own plant.

Cannon & Haase have commenced work on their new elevator at Granville, Iowa. The main part, or elevator proper, will be 16x35 and 80 feet high. On each side of this will be four storage tanks, each 17 feet in diameter and 54 feet high. The space between these tanks will also be utilized for storage rooms. The store tanks will be made of concrete, reinforced with steel every seven inches. The main building will also be made of concrete, steel reinforced. The floors will be of concrete with steel netting. The beams also will be of concrete, steel reinforced. The combined buildings will occupy ground space of 120x140, and their construction will require 50 carloads of gravel and 10 carloads of cement, and will give employment to twenty-five men the greater part of the summer. This elevator will be absolutely fireproof and will be one of the most substantial, one of the most capacious, and in everyway one of the most modern west of Chicago. It will have a capacity of 125,000 bushels.

OHIO, INDIANA AND MICHIGAN.

Smith Crawford will build a \$5,000 elevator at Youngstown, Ohio.

F. E. Blair has succeeded Hildebrand & Blair in the grain business at Edison, Ohio.

The Raymond Life Co. of Toledo, Ohio, will erect an elevator at New Haven, Ind.

Daniel Burns, the grain dealer of Rossburg, Ohio, has been succeeded by Ross, Beam & Son.

E. C. Thorne of Bay City, Mich., has lately completed a 10,000-bushel elevator for beans.

Simmons & Faulkner, owners of an elevator at Pemberton, Ohio, have dissolved.

G. E. Wells & Co. have succeeded R. A. Wells in the grain business at Pataskala, Ohio.

J. P. Barnthouse has sold his elevator at Morral, Ohio, to the Morral Lumber & Elevator Co.

The Oxford Milling Co. of Colling, Mich., has commenced the construction of its new elevator.

Clarence Schlientz of Yellow Springs, Ohio, is building an addition and a new office to his elevator.

The Farmers' Elevator Co. of Houston, Ohio, has increased its capitalization from \$5,000 to \$10,000.

N. E. Beach, owner of the elevator at Bridgeport, Mich., has been succeeded by Beach & Spence.

Tis reported the new Travis Elevator at New Haven, Ind., has been sold to Strauss Bros. of Fort Wayne.

Warren Speicher of Wabash, Ind., is to erect a 25,000-bushel elevator at Gas City, Ind. He will expend \$4,000 or \$5,000.

Maulding Bros. of Dahlgren, Ill., have acquired a site for a grain warehouse at Evansville, Ind., and will erect a building soon.

William Sebald will erect a modern grain elevator at Middletown, Ohio. He purposes to have one of the largest in that section.

Frank and John McComas of Ockley, Ind., have purchased an elevator at Greenwood, Ind. C. A. Hornbeck will have charge of the elevator at Ockley.

The Bloomington Milling Co. of Bloomington, Ind., owned by James Karsell & Sons, will erect a 50,000-bushel elevator. Concrete will be the material used.

For the consideration of \$90,000 the Toledo & Wabash Elevator at Toledo, Ohio, was transferred to Edward B. Pryor of the Wabash Railroad Co. It was merely a formal transfer.

Charles Sutters of Vanlue, Ohio, has placed his contract with the Burrell Engineering & Construction Co. for a 15,000-bushel grain elevator. It is to be finished by June 15.

Dr. S. J. Irwin of Tarlton, Ohio, has his elevator in operation and is well pleased with the success of the machinery equipment which was installed by the Straub Machinery Co. of Cincinnati, Ohio.

The Independent Elevator Co. has been incorporated at Alma, Mich., by W. T. Naldrett, Heinz McCormack, Fred E. Smith, A. W. Wright and others. The capitalization is \$15,000, fully paid in.

John N. Walker and John C. Chambers of Lebanon, Ind., have purchased the two grain elevators at Wheatland, Ind., from John Allen and Capt. James Welton. Mr. Chambers was with the W. H. Small Grain Co. of Evansville for many years.

Recently the capitalization of the Cincinnati Elevator Co. (the C. H. & D. Co.) which operated the old grain elevator at Cincinnati, Ohio, abandoned some months ago, was reduced from \$75,000 to \$25,000. Judson Harmon is president of the company. It has been decided to wreck the present elevator and build a team track on the site. Later, when the C. H. and D. Co. is out

of the courts, the elevator may be rebuilt at some other point.

A dispatch from Indianapolis, Ind., says: "The Witherspoon-Engler Company, organized under the laws of Illinois, is the first new foreign corporation to comply with the new foreign corporation law of the state. This company has a capital of \$50,000, and its business in this state has to do with erecting a grain elevator for the Western Glucose Company at Roby, Ind."

DAKOTAS.

A farmers' elevator will soon be building at Carson, S. D.

Work has commenced on the new elevator at Cuba, N. D.

There is some talk of a farmers' elevator at Hurd, N. D.

A farmers' elevator will be constructed at once at Tioga, N. D.

The Lyon Elevator Co. will build a plant at Buchanan, N. D.

Two new elevators are to be constructed at Brown's Valley, S. D.

Farmers in the vicinity of Merricourt, N. D., are talking of an elevator.

Henry Lueth of Spencer has acquired the Peavey Elevator at Salem, S. D.

An addition is to be built onto the R. A. Fox Elevator at Bantry, N. D.

There are three elevator sites at \$500 each for sale at Nunda, S. D.

The capacity of the Cargill Elevator at Finley, N. D., is being increased.

A new elevator is to be started at once by the farmers around Artley, S. D.

Recently the Thorpe Elevator Co. acquired the Page Elevator at Leeds, N. D.

According to reports five elevators will be built at Warwick, N. D., this summer.

Rumor says the proposed elevator at Bergen, N. D., will not be built this year.

Henry Giebink of Alton, Iowa, will erect a spacious elevator at Litchville, N. D.

F. W. Albrecht of Bowdon has bought the Poehler Elevator at Denhoff, N. D., for \$7,000.

Work has been started on the 50,000-bushel Cousin's Elevator at Sykeston, N. D.

The Osborne-McMillan Co. is building an addition to its plant at Courtenay, N. D.

Work has been commenced on the new Empire Elevator Co.'s plant at Frederick, S. D.

The Andrew & Gage Elevator at Sanborn, N. D., will be doubled in capacity this spring.

Reports are current that a farmers' elevator will be erected at Arnold, N. D., this summer.

The Thorpe Elevator Co. is considering the erection of an elevator at Beaver, N. D.

A large addition will be built to the elevator owned by the farmers at Clear Lake, S. D.

George H. Aiken, a grain buyer at Sarles, N. D., is talking up a farmers' elevator company.

A farmers' elevator company has been organized to construct an elevator at Park River, N. D.

The Victoria Elevator Co. has started the construction of an elevator at Williston, N. D.

Reports of a farmers' elevator company with a capital of \$9,000, come from Lone Tree, N. D.

F. E. Scott of Watertown, S. D., is interested in a farmers' elevator to be erected at Kampska.

John Barker is razing his grain warehouse at Bowdle, S. D., and will quit the grain business.

A. L. Martin of Sentinel Butte, N. D., announces an elevator will be erected there this summer.

Wreckers have been razing the old elevator of the Great Western Elevator Co. at Steele, N. D.

Work is under way on the new elevator the William Krotter Co. is building at Gregory, S. D.

It is said the Diamond Boat Co. of Lake Traverse, N. D., will erect a couple of elevators this spring.

W. D. McKinnon has sold his grain business at Ray, N. D., to his brother, J. L. McKinnon of Minot.

A farmers' elevator company has been formed at Columbus, N. D., to erect a modern grain elevator.

About the middle of April the Empire Elevator Co. closed its elevator at Brampton, S. D., for the season.

Grain is being bought at the Farmers' Elevator of Warren, S. D., where Charles Hogeboom is in charge.

With the conditions favorable the Lyon Elevator Co.'s new elevator at Ryder, N. D., will be completed shortly. The Osborne-McMillan Com-

pany is also hurrying along the work on its building.

The Farmers' Elevator Co. has been incorporated at Pukwana, S. D., with a capital stock of \$25,000.

The Western Elevator at Watertown, S. D., has been sold to M. W. Murphy who takes possession in June.

The H. C. Knapp Elevator of Howard, S. D., has been sold to Wait & Dana, who are now in possession.

The McCaul-Webster Co. is erecting a new grain elevator at Yankton, S. D., where it replaces the old one.

The two elevators at Colgate, N. D., were recently supplied with cars, and business has been resumed.

Wait & Dana propose to build an elevator at Corsica, S. D. They own elevators at Stickney and Armour.

The Gribbin-Alair Elevator at Sykeston, N. D., has been commenced. It will have a capacity of 60,000 bushels.

Farmers around Rennie, N. D., met recently to organize an elevator company. An elevator will be constructed at Lignite.

E. L. Williams has disposed of his elevator at Lester Prairie, S. D., and will locate elsewhere on the M. & St. L. Railroad.

A 30,000-bushel annex is to be built to the Osborne-McMillin Elevator at Harvey, N. D. Work has already been started.

At Harrisburg, S. D., the Harrisburg Farmers' Elevator & Supply Co. has been incorporated with a capitalization of \$15,000.

A crew of carpenters are at work on the Homestead Elevator, the fifth for Douglas, N. D. There are prospects for two more.

Articles of incorporation have been granted the Foxholm Farmers' Elevator Co. of Foxholm, N. D., which has a \$10,000 capitalization.

W. J. Thompson has purchased the elevator at Page, N. D., from the Minnesota & Western Grain Co. He assumes control on June 1.

The Ostroot Elevator Co. is the new firm in charge of the property of the Lake Preston Milling Company at Lake Preston, S. D.

It is said the A. H. Betts Elevator at Chancellor, S. D., will be replaced with a new one, which will be larger and more modern.

An addition which is expected to double the present capacity of the Northland Elevator Co.'s plant at Tolley, N. D., will be commenced soon.

The O. & M. Co. will build another elevator at Manfred, N. D., similar to the one already in operation there. Work will be started at once.

A 30,000-bushel grain elevator is being erected at Toronto, S. D., for the farmers' company. A contractor from Minneapolis has the work.

A modern elevator will be erected by the Farmers' Grain & Live Stock Co. of La Bolt, S. D. A. G. Swanson of Strandburg is secretary of the company.

By appealing to the railroad commissioners the elevators at Baltic, S. D., recently came into possession of seven cars and were enabled to resume business.

The Reagan-Hooper Elevator is going up rapidly at Leola, S. D. It will have a capacity of 30,000-bushels and will have a large cleaner included in the machinery.

Late last month the Farmers' Elevator Company at New Rockford, N. D., had removed the 60,000-bushel pile of wheat from the ground and was shipping it out.

F. M. Wooden is president of the newly organized Farmers' Elevator Co. at Artesian, S. D. Ed Diggerness is vice-president; J. E. Wilson, secretary, and L. M. Doyle, treasurer.

A. N. Barber has contracted for a 30,000-bushel elevator at Manchester, S. D. The Younglove Construction Co. has the contract and will include the installation of a passenger elevator.

F. L. Duke is president of the recently organized Farmers' Elevator Company at Butler, S. D., which will soon commence an \$8,000 elevator. J. L. Barry is secretary and Andrew Grode is treasurer.

Samuel Heggen of Fay, N. D., and a number of farmers of that section will build a farmers' elevator at Stampede, N. D. It will be known as the Ward County Farmers' Grain and Mercantile Co.

Announcement is made that the Dell Rapids Elevator Co. of Dell Rapids, S. D., has disposed of its plant to the D. Rothschild Grain Co. of Davenport, Iowa. The plant was owned by O. F. Bowles, who has operated it for many years, but

now it will be in charge of E. N. Morgan, a former employee.

About \$3,500 has been subscribed toward a new Farmers' Elevator at Tower City, N. D. T. M. Crawford is president; J. N. King, vice-president; G. W. Kelley, secretary, and C. T. Carroll, treasurer.

W. E. Dickenson, formerly in charge of the Blankenburg Elevator at Oaks, N. D., has purchased a half interest in the Marshall-McCartney Elevator at Fullerton, N. D., and will go to take charge of it.

An addition is being built onto the Osborne-McMillan elevator at Leal, N. D. Woodworth & Co. are about to commence a new elevator and it is reported additions will be built to both the Royal and the L. J. Olsen elevators.

It is reported the Ypsilanti Farmers' Elevator Co. has bought the Pierce-Blewett Elevator at Ypsilanti, N. D. Possession is given July 1. The plant was erected last year and has a capacity of 40,000 bushels. Two other elevators with a combined capacity of 45,000 bushels are in the town which is said to have handled a quarter of a million bushels of the 1906 crop.

It has been decided to build a terminal elevator at Superior, N. D. The matter came up at a meeting of a joint committee of the North Dakota Bankers' Association and a committee of the North Dakota Branch of the Society of Equity. The belief is that with the new terminal elevator the grain conditions at Duluth and Minneapolis will be bettered. J. W. Scott of Gilby is chairman of the committee in charge and W. C. McFadden of Fargo is secretary.

MISSOURI, KANSAS AND NEBRASKA.

M. G. Pitts of Jetmore, Kan., has sold out his grain business.

Sturgeon & Co. have sold out their grain business at Seward, Kan.

Recently a new elevator company was organized at Bloomfield, Neb.

A 20,000-bushel elevator will be built by the Equity Co. at Oakley, Kan.

The Omaha Elevator at Alda, Neb., has been closed down for the present.

Rasmus Anderson has disposed of his grain business at Broken Bow, Neb.

The Crowell Lumber and Grain Co. of Blair, Neb., is preparing to move to Omaha.

The St. John Elevator Co. of St. John, Kan., has been capitalized at \$6,000 and incorporated.

Walker & Rhodes have succeeded the grain firm of Nordyke, Walker & Meyer at Bethany, Mo.

Kinion & Dwyer is the style of the elevator firm at Davis, Mo., formerly known as Teague & Dwyer.

The Eisenmayer Milling Co. will begin at once the construction of a 10,000-bushel elevator at Battlefield, Mo.

Many improvements have been made in the Thorpe Elevator at Waterbury, Neb., which has just been remodeled.

Articles of incorporation have been granted the Citizens' Grain Co. of Abbeyville, Kan., which is capitalized at \$10,000.

Materials for the new Westbrook Elevator at Rising Sun, Neb., are on hand, and the work will proceed at once.

Articles of incorporation have been granted the Dayton-Otis Grain Co. of Kansas City, Mo., which is capitalized at \$20,000.

G. A. Lyman of St. Louis has gone to McAlester Okla., where he has engaged in the milling and elevator business with C. W. Vilott.

At Stromsburg, Neb., the Bell & McCane Elevator is being torn down and the lumber saved for an addition to the elevator at Shelby.

Recently the Snell Mill and Grain Co. of Clay Center acquired an elevator at Dresden, Kan. The firm will buy other plants in that section.

The Farmers' Elevator Co. of Webb, Neb., has organized with H. C. Bittinger as president; C. F. Lawson, vice-president; J. P. Grieve, secretary and treasurer.

J. G. Arbuthnot of Haworth, Kan., has recently had the Witte Iron Works Co. install a complete elevator plant, including a 15-horse power Witte Gasoline Engine.

The Beloit Milling Co. of Beloit, Kan., is constructing an elevator 30x54 feet in dimensions and 50 feet high. This will offer the company an elevator capacity of 100,000 barrels of wheat.

The Wilson Grain Co. of York, Neb., has incorporated with a capitalization of \$10,000. State Representative F. C. Wilson of Anselmo is president of the concern, H. R. Hatfield of York is

vice-president and treasurer, and C. A. Addington of York is secretary.

R. T. Hutchinson of Valley Center, Kan., is remodeling his elevator. The Witte Iron Works Co. of Kansas City, Mo., will install a 15-horse power Witte Gasoline Engine to supply the power.

The Citizens Grain Co. of Abbyville, Kan., which is enlarging its plant, is replacing its present power with a 15-horsepower Witte Gas Engine. All other machinery of like capacity is being installed.

E. W. Wright, of the grain firm of Wright & Gray, has succeeded his partner in business at Lyons, Kan. The partnership has existed twelve years. An elevator at Noble is also included in the transaction.

Ware & Leland, grain brokers of Chicago, recently established an office in the Board of Trade at Omaha, Neb., with S. E. Barnes as manager. In the past the Exchange Grain Co. represented the firm in this city.

Announcement is made that the La Mar Mill & Elevator Co. of La Mar, Colo., has acquired the McBeth & Kinneson Elevator at Carson City, Kan., and will begin at once to increase the capacity to 50,000 bushels. The same firm is building large elevators at Dodge City and Cimarron.

Articles of incorporation have been granted the Saunders-Weststrand Co. of Bloomfield, Neb., which succeeds the Peavey Co. in the grain and elevator business. The incorporators of the new concern are S. Saunders, J. F. Weststrand, Nic Paper, E. H. Mason and W. F. Weststrand, all of Bloomfield. The capital stock is \$300,000, of which \$150,000 is paid up. Sherman Saunders is president, and J. F. Weststrand, secretary. The head office will be located at Wakefield and will be in charge of J. F. Weststrand and W. F. Weststrand. Mr. Saunders' time will be chiefly taken up on the road. The Bloomfield elevator is in charge of Nic Paper.

CANADIAN.

Wentworth, Sask., may have an elevator this summer.

J. H. Raymer will build an elevator at Toronto, Ont.

An elevator and flour mill is said to be assured at High River, Alta.

T. J. Hare is endeavoring to promote an elevator at Teulon, Man.

A new elevator is contemplated at Beatty Siding, near Melfort, Sask.

The Hall Elevator Co. contemplates building a flour mill at Killam, Alta.

There is said to be a good chance for another elevator at Mundare, Sask.

S. Hunter, the seed merchant at Regina, Sask., has sold out to W. Scudder.

The Imperial Elevator Co. will construct a new elevator at Moose Jaw, Sask.

The Imperial Elevator and Lumber Co. is improving its property at Caron, Sask.

It is understood the Western Elevator Co. will build an elevator at Kennedy, Sask.

The Ogilvie Elevator Co. plans an elevator costing \$175,000 at Fort William, Ont.

Recently the Dominion Elevator at Arnaud, Man., was reopened with J. Sullivan in charge.

Two new elevators of large capacity are to be erected at Roblin, Man., early this summer.

The car shortage has retarded the elevator business at Alameda, Man., to a noticeable extent.

The consolidated Elevator Co. will build a \$200,000 elevator at Fort William, Ont., this spring.

L. T. McLandress of Redvers, Sask., is exerting his efforts towards securing an elevator for that place.

Fire destroyed J. O. Smith's elevator at Eli, Man., recently and 6,000 bushels of grain were consumed.

During the past month the Lake of the Woods Milling Co. closed its elevator at Bagot, Man., for the season.

A report says several applications for elevator sites have been refused at Davidson, Sask., although three or four others are badly needed.

Farmers in the neighborhood of Ericson, Man., are desirous of securing an elevator. They have more than 300,000 bushels of grain to market.

A new 500-barrel mill is to be erected by the Saskatoon Milling and Elevator Co. of Saskatoon, Sask. It is said a 100,000-bushel elevator will be built.

Besides supplying the trade with all kinds of weather Medicine Hat, Alta., is now dealing in grain. The first carload of wheat ever shipped from this town was billed out early last month.

A new elevator is being erected at Bender, Sask., by the Northern Elevator Co.

The Saskatchewan and Western Elevator Co. has secured a site at Moose Jaw, Sask., and will erect a modern grain elevator.

Albert Trudell has sold his grain and other business at Montreal, Que., to C. A. Dulas & Co. He has left with Mrs. Trudell on a four months' sojourn abroad.

Articles of incorporation for the Estevan Farmers' Elevator and Trading Co. of Estevan, Sask., have been received and a new elevator is to be erected shortly.

The Canadian Society of Equity contemplates the erection of an elevator at Carstairs, Sask., which will have a capacity of 60,000 to 80,000 bushels of grain.

One day recently \$18,000 was bid at Montreal, Que., for a seat on the grain exchange. None was offered for less than \$20,000, and the last sale, a forced one, was for \$15,000.

George W. Wood's alleged bucketshop was visited by the police of Winnipeg, Man., for the second time on April 13. The paraphernalia was carted to the police station and the frequenters locked up.

According to the Saskatchewan Minister of Agriculture 200 cars a day will be required to clear the elevators and granaries of western Canada in time for the next wheat crop. That was a month ago and the situation remains unchanged.

An authority says there are hundreds of towns and villages throughout the Canadian Northwest that are desirous of securing elevators, and many of the newer towns are willing to extend handsome bonuses to any elevator man who will build.

The Hedley Shaw Milling Co. of Toronto, Ont., has consolidated with the Maple Leaf Milling Co. of Kenora, Ont., and the new combine now plans to build large storehouses and a complete line of elevators, numbering some thirty or more, throughout the west of Canada.

A dispatch from Winnipeg, Man., is authority for the statement that the Society of Equity has contracted for the immediate construction of 120 grain elevators through western Canada. This will be accomplished with the funds subscribed by the grain growers to defeat the alleged monopoly of grain men and railroad subsidiary organizations which now control most of the grain elevators of western Canada.

A report says the Canadian Pacific will rebuild Elevator "D" at Fort William this summer on a much larger scale. It will have a capacity of 200 cars a day while the old one handled but 75 cars. Elevator "D" has been twice burned, the working house being entirely destroyed each time. It was built in 1898, to hold 1,500,000 bushels, and was added to in 1902, so that its capacity will be over 3,000,000 bushels and will be the largest single storage elevator in the world.

On May 3 a strike of the grain handlers in the elevator belonging to the Canadian Pacific and the Canadian Northern railroads at Fort William, Ont., was precipitated because of the failure of the owners to increase the wages. The men asked 25 cents an hour—they had been getting 20—and the companies saw fit to grant them but 22½ cents and time and a half for overtime. As a result of the strike, which has since been declared off pending arbitration, the grain fleet was tied up for a few days.

EASTERN.

A. M. Wilder is building a grain house at Perkinsville, Vt.

Fred L. Nickerson is going out of the grain business at Rockport, Mass.

F. A. Sherwin has commenced the erection of a new grain store at Graton, Mass.

Bremner & McNally, dealers in grain and feed are enlarging their quarters at Augusta, Me.

Bedard & Carlisle of St. Albans, Vt., have just started a retail grain, flour and feed business.

W. E. Hunt of North Charlestown, has acquired the grain business heretofore owned by Lyman Brooks of Charlestown, Vt.

Wardell & Nutting is the style of a new grain firm at Mechanic Falls, Me., which has leased the plant from the J. W. Penney & Sons' Co.

The Corn Exchange Elevator site at Oswego, N. Y., has been sold for manufacturing purposes. It was owned by William H. Jackson of New York.

Recently the Berkshire Coal and Grain Company made extensive improvements on its plant. The boiler room was moved back to give additional space.

The R. D. Eaton Feed and Grain Co. of Norwich, Conn., is erecting a warehouse 72x190 feet in size. It is being built of cement, brick and stone, and is to be absolutely fireproof. The

Eaton Feed and Grain Co. when the new building is completed, will have one of the largest plants in central New York. The plant will have an elevator capacity of 100,000 bushels of grain and the warehouse capacity will exceed 6,000 tons of feed.

WESTERN.

W. A. Pope succeeds C. E. Randleman & Co. in the grain business at Baker City, Ore.

B. R. Davis is building an elevator at Fowler, Colo., which will accommodate ten carloads of grain.

The Seldomridge Grain Co. of Colorado Springs Colo., is making extensive improvements on its plant.

Irwin Bros., of Holyoke, Colo., have dissolved partnership. J. M. Irwin will handle the grain business in the future.

Articles of incorporation have been granted the Mize-Tessier Grain and Hay Co. of New Orleans, La. It is capitalized at \$6,000. Among those interested are James S. Mize, president; Charles A. Tessier, Jr., vice-president, and W. M. Mize, secretary and treasurer.

SOUTHERN AND SOUTHWESTERN.

There is talk of building a 100,000-bushel rice elevator at Stuttgart, Ark.

A \$10,000 addition is to be built upon the Patton-Hartfield Elevator near McLemore, Tenn.

McCoy Bros. & Pitts are reported to have succeeded McCoy & Pitts in the grain business at Echu, Miss.

Some parties from Kansas City, La., are contemplating the erection of a grain elevator at Alexandria, La.

A rice elevator is to be erected for the Bailey Mills Co. of El Campo, Texas. A concrete foundation is being constructed.

The Midland Mill & Elevator Co. of Muskogee, I. T., will soon have its new plant completed. An elevator of 500,000 bushels' capacity is part of this.

Arthur Stephenson, a grain man of Enid, Okla., has purchased the Farmers' Elevator at Lahoma. Mr. Stephenson has just been elected mayor of Enid.

The Vici-Rural Elevator Co. has been incorporated with a \$6,000 capital. A. E. McDole, John M. Chafer and H. R. Canfield are among those interested.

The Navina Elevator Co. has been incorporated at Navina, Okla., by H. R. Canfield, A. E. McDole and J. M. Crager with a capitalization of \$10,000.

T. J. Hook is having a 20,000 bushel fireproof elevator built at Hardinsburg, Ky. The structure will adjoin his flour mill and will be of steel and concrete.

The Farmers' Elevator Co. at Hunter, Okla., has sold out to a new company, in which the bank people are interested. The farmers will build a new plant.

The Pritchard Milling Co. of Houston, Texas, has let the contract for its rice mill and elevator. The latter will be 100 feet high and 41x71 feet in size. It will cost \$15,000.

The Fielder Mill and Grain Co. of Sherman, Texas, has been incorporated with a capitalization of \$80,000. Among those interested are W. O. Brackett, A. A. Fielder, D. W. Gulick, R. S. Fulton and others.

There is a plan on foot at Nardin, Okla., for the farmers' union to build a central elevator at that point, and others in the territory adjacent. John B. Brooks of Nardin is one of those principally interested.

A contract for the erection of a \$20,000 rice elevator for the El Campo Rice & Elevator Co. has been let. The latter firm was incorporated last month with a capitalization of \$25,000, by E. L. Correll and associates.

Articles of incorporation were granted the Mooreland Union Grain and Supply Company of Mooreland, Okla., which is capitalized at \$10,000. The directors include F. J. Knittel, J. J. Baquat, H. T. Stall, F. E. Schilling and M. E. Hufford.

Incorporation papers have been granted the Independent Elevator Co. of Weatherford, Okla., capitalized at \$10,000. Those primarily interested are C. G. Sohlberg, F. P. Johnson, Oklahoma City; P. J. Mulkane, El Reno and T. P. Smith, Weatherford.

E. W. Morten Jr., connected with a milling company which has four elevators in North Texas, located at Wichita Falls, Harrold, Electra and Oklaunion, who is familiar with existing wheat conditions in the state, says that all four of the North Texas elevators enumerated will be closed on account of the failure of the Texas wheat crop.

The Cincinnati Grain Co. has placed its contract with the Burrell Engineering & Construction Co. for a 10,000-bushel transfer elevator and warehouse at Latonia, Ky. The warehouse will be 50x176 feet and one story high. The buildings are to be completed by July 1.

MINNESOTA AND WISCONSIN.

The Benson Elevator has been closed at Luverne for the season.

There are rumors that a third elevator is to go up at Lockhart, Minn.

The Farmers' Elevator Company at Steen, Minn., has been fully organized.

Willis Funk of Canton, Minn., has purchased an elevator at Glenwood, Minn.

Late in April the Great Western Elevator Co. closed its plant at Gibbon, Minn.

The Loyal Roller Mill & Produce Co. of Loyal, Wis., is buying grain at its doors.

H. O. Mellum is planning to build a grain elevator in the vicinity of Voss, Minn.

It has been decided to double the capacity of the farmers' elevator at Waupan, Minn.

It is understood another elevator is to be built at Lockhart, Minn., before the next harvest.

The Farmers' Elevator Co., of Kenyon, Minn., is erecting a storage building 40x20 feet in size.

A gasoline engine is to be installed in the Northwestern Elevator Co.'s plant at Holland, Minn.

The Farmers' Elevator Co. of Blooming Prairie, Minn., have a new elevator under consideration.

The Farmers' Elevator Co. of Vesta, Minn., is operating a feed mill in connection with its plant.

A stock company of farmers may be formed at Belle Plaine, Minn., to buy the Peavey Elevator.

Hamm Bros., of Honey Creek, Wis., are contemplating the erection of an elevator at that place.

It is reported the Peavey Elevator at Woodstock, Minn., has been sold to the Farmers' Elevator Co. for \$5,000.

L. J. Adgate, C. A. Goodrich, W. J. McNamara and others of Cylon, Wis., are organizing a farmers' elevator company.

The Hampton Farmers' Co-Operative Elevator Co. of Hampton, Minn., will erect a 40,000-bushel grain elevator.

P. O. Christianson and Evan Oie have purchased the Gillespie Elevator at Greenbush, Minn., and are operating it.

E. E. Smith of Sioux Falls, S. D., has purchased the Peavey elevator at Murdock, Minn., and assumes charge on June 1.

James Morton, James Agar, Eli Brown, William Croom and others are promoting a farmers' elevator company at Hancock, Minn.

A 50,000-bushel grain elevator, for which \$7,000 has already been subscribed, will be built by the farmers of Sleepy Eye, Minn.

Ole Halvorseth has been making improvements on his elevator at Donaldson, Minn. A new spout has been added for loading purposes.

Among those interested in the new Ormsby Farmers' Grain Co. of Ormsby, Minn., are A. A. Olson, John Hagen, J. H. Hilgendorf, Christ Stuck and others.

E. S. Talbott is planning a 35,000-bushel elevator to be constructed at once at Browns Valley, Minn. He will install an automatic scale among other things.

It is said the grain elevator at Brooklyn, Wis., is to be cut down to about half its present height, owing to danger which surrounds other buildings in case of fire.

After many years of service the Northwestern Elevator at Litchfield, Minn., is being razed. The company has leased the Quinn Elevator for a number of years.

The Farmers' Elevator Company of Owatonna, Minn., will rebuild its elevator at once. Soren Petersen is chairman of the committee in charge of the arrangements.

The farmers of Grand Meadows, Minn., have incorporated and will build a grain elevator and warehouse early this season. It will have a capacity of 35,000 bushels.

Reports from Oakfield, Wis., say the George Day Elevator has been sold to a farmers' stock company. The new company will be known as the Oakfield Elevator Company, and is incorporated under the laws of Wisconsin with an authorized capital of \$7,000 and a paid up capital of \$5,000. The company expects to handle all kinds of grain.

feed, salt, and coal. The following officers will serve the ensuing year: President, F. H. Messner; vice-president, J. H. Birne; secretary, W. C. Ehrhardt; treasurer, W. E. Bristol.

W. F. Markham of Hayfield has sold his elevator at Sargeant, Minn., to H. L. Stephenson, who is given possession in June. The purchaser is at present in charge of the rival elevator.

Articles of incorporation have been granted the Ormsby Farmers' Grain Company of Ormsby, Minn., which is capitalized for \$10,000. A. A. Olson, John Toedt, Eve O. Holte and others are interested.

The Farmers' Exchange of Thief River Falls, Minn., is negotiating for the purchase of the St. Anthony & Dakota Elevator. Should the deal fail to go through the elevator will be operated by the company.

The Peavey elevators at St. James, Lake Crystal, Vernon Center and Winnebago, Minn., have been purchased by the C. S. Christensen Co. of Madelia, Minn., which now operate a line of seven elevators.

Stockholders in the Northwestern Co-operative Coal & Slack Co. are endeavoring to have an elevator erected at Ashland, Wis. The company has issued \$60,000 worth of stock. Frank A. Holmes of Chicago is secretary.

Grieg & Zeeman of Estherville, Minn., have acquired the line of elevators owned by A. D. Packard & Son of Sherburn, who will retire from the business. The purchase includes elevators at Sherburn, Echols, Dunnell and Jackson.

A new 35,000-bushel grain elevator is to replace the one burned at Hendricks, Minn. The Hendricks Farmers' Elevator Co. will spend about \$6,000 on the plant, which is to be ready by July 1. A Lake Benton firm has the contract.

The Great Eastern Elevator Co. has sold to D. L. Raymond and John H. Riheldoffer, of the Minneapolis Chamber of Commerce, the 1,500,000-bushel elevator at Southeast Minneapolis, known as Elevator "H." The building is located on the Great Northern and the Chicago Great Western tracks and is of fireproof construction. The elevator proper has a capacity of 900,000 bushels, while the warehouse will accommodate 150,000 bushels of grain. The property is valued at \$250,000, but the terms of the sale are withheld. Mr. Raymond is now identified with the Acme Grain Company, and Mr. Riheldoffer has been for a number of years with the grain house of Commons & Co. Both are active on 'Change and are representatives of the younger Chamber of Commerce element that is working into control of larger affairs. The plant will be operated in connection with the Acme Grain Company, and a new and larger company, the details of which have not yet been worked out, will be organized.

Francis J. Miner, head of the Cella bucket-shop of St. Louis, has asked for admission to the Chicago Board of Trade.

The grain-handling facilities of the province of Saskatchewan do not multiply quickly enough to keep pace with the increased production of wheat, says the Toronto Globe. During the period from 1901 to 1904 the aggregate capacity of the elevators rose from 2,978,000 bushels to 9,413,000 bushels, while the production of wheat increased from 11,956,000 to 15,000,945 bushels. The production was gaining at the rate of 33 per cent, and the elevator accommodation was growing at the rate of 315 per cent.

Even this enormous growth was insufficient to meet the demand, and blockades occurred at almost regular intervals, owing to the inability of the railway company to supply cars promptly. Since 1904 the production has grown to 37,040,000 bushels, an increase of more than 130 per cent. The elevator capacity has grown during the same time to 12,962,000 bushels, an increase of only about 37 per cent. The production of wheat was increased during the past two years three and one-half times as fast as the elevator capacity for the storage of the grain. The deficiency might have been made up by the construction of new lines of railway and the supplying of additional rolling stock, but the increases in this respect have not come within range of meeting the difficulty, as has been abundantly proved by the failure of the railway companies to deliver the last crop. From all quarters has come the cry of insufficient car accommodation. The farmers and the elevator men alike have been keen to obtain cars at any time, but the business of marketing the grain would have been greatly facilitated if some pretense at regularity in the furnishing of these had been maintained. When the requirements of the new lines are also considered, the deficiencies in the supply become more striking.

COMMISSION

To accommodate his increasing business Sam Finney of the Board of Trade, Chicago, has taken larger offices in room 715 of the Board of Trade Building.

The firm of Brown & Patterson of Cincinnati, Ohio, has gone out of business. The firm's warehouse was recently purchased by the Early & Daniel Co.

Ware & Leland, Chicago, have secured the services of John H. Herron to represent them in Iowa territory. Mr. Herron will make his headquarters at Fort Dodge, Iowa.

Leeds Mitchell, who for the past three years has been in charge of the stock and bond department of Pringle-Fitch-Rankin of Chicago, has been admitted to partnership in the firm.

The Cincinnati Grain Company of Cincinnati, Ohio, has established a branch office at Decatur, Ill. It will be in charge of Peter Van Leunen, who will make his future home in that city.

E. Nelson Blake, who was president of the Chicago Board of Trade when the present building was dedicated, was greeting old friends on 'change recently. Mr. Blake now resides at Arlington, Mass.

Dusenberry & Co., commission merchants in hay, straw and grain at New York City, have removed to the West Street Building at No. 90 West Street. They had formerly occupied a building on the same plot about 20 years.

John W. Gates, who has been at times a spectacular figure in the Chicago grain market, has sold his membership on the Board of Trade. The firm of Charles G. Gates & Co., of which he is a member, will go out of business on June 1.

Dwight M. Baldwin of Minneapolis, Minn., has retired from the grain commission business at Duluth, Minn., the business of the Duluth office having been purchased by Wm. Grettum. The latter has been for many years the Duluth representative of Mr. Baldwin.

Edward G. Heeman of Chicago announces in a recent circular that he will move about May 15 to more commodious quarters in the New Commercial National Bank Building in the arcade of the main floor. Mr. Heeman transacts his business through Chas. W. Gillett.

Chapin & Co., millfeed, with offices at Milwaukee, Minneapolis, St. Louis, Buffalo and Boston, have incorporated their business as Chapin & Co., incorporated, with paid-up capital of \$150,000. Officers are Robert W. Chapin, president; John E. Geraghty, vice-president; Charles J. Chapin, secretary and treasurer.

The Exchange Grain Co. of Omaha, Neb., of which the late A. B. Jaquith was president, has been dissolved, as the accounts of the firm have been closed up by the former vice-president, G. E. Barnes. The latter is now local representative of Ware & Leland, Chicago, with offices in the Omaha Board of Trade Building.

L. S. Hoyt, representative of W. H. Lake & Co. of Chicago, who has spent the past two months in Kansas, Oklahoma and the Southwest, was expected in Chicago about the middle of May. Mr. Hoyt's reports on the crop outlook and conditions have been accurate and trustworthy, and were watched for, when Mr. Hoyt was in the field, by the entire trade.

The Edwards & Loomis Co. of Chicago has been incorporated to succeed S. W. Edwards & Sons. The capital stock is \$35,000. The company has been located for years at 110 North Elizabeth Street, where they have a large hay and grain warehouse and do a thriving retail business. The old officers remain the same, the incorporators being S. T. Edwards, M. S. Lussner and F. A. Hefferman.

Lamson Bros. & Co., grain commission merchants of Chicago, who recently secured the services of Geo. B. Ehle to represent them in Iowa, have just opened branch offices in some of the leading cities in that state, including Waterloo, Iowa City, Storm Lake, Des Moines, Cedar Rapids, Ft. Dodge, Mason City, Iowa Falls, Parkersburg and Independence. Mr. Ehle is in general charge of these offices and they are taken care of by experienced local managers. Lamson Bros. & Co. are one of the oldest firms on the Chicago Board of Trade and their business has been growing rapidly of late both in cash stuff and futures.

Send us the grain news from your neighborhood.

THE EXCHANGES

The Grain Growers' Grain Co. has been restored to membership on the Winnipeg Grain Exchange.

The Grain Exchange of the Atlanta Chamber of Commerce is now in full swing, trading having been inaugurated last month.

The annual meeting of the stockholders of the Philadelphia Bourse was held on May 14, when the 16th annual report of the directors was presented.

Chicago Board of Trade memberships are feeling the effect of the increased business. A recent sale was made at \$2,000, which was \$200 over the former price.

H. B. Slaughter, for years a member of the Chicago Board of Trade, and a former director, has posted his membership for transfer. He has not been active for nearly a year.

The grain committee of the New Orleans Board of Trade has sent letters to the exchanges at other export points asking that representatives be named to attend a meeting to be called to decide upon the uniform grading of export grain.

The fiftieth anniversary of the Buffalo Chamber of Commerce was celebrated on April 18, when a banquet was held at the Ellicott Club with over 800 business men in attendance. The banquet also marked the completion of the new Chamber of Commerce building at Main and Seneca streets. William H. Gratwick, president of the chamber, presided, and the speakers included Governor Hughes and Mayor Adam of Buffalo.

Members of the Richmond (Va.) Grain Exchange are complaining of the methods of the railroads in handling grain at that point, and also declare that there is pressing need of a new elevator. The only elevator in Richmond is owned by the Chesapeake & Ohio Railroad and members of the trade say that it is out of date and an injury to the business rather than a help. It is declared that the track facilities are inadequate and the machinery antiquated and worn out. Grain to be handled in the elevator has to pay one cent a bushel more if hauled on other cars or roads than the Chesapeake & Ohio, and this the members of the Exchange say is unjust. At present it takes from two to three days to get a car in or out of the elevator, and with the present poor facilities the structure has far more than it can do.

NEW BARGES AT PHILADELPHIA.

The Pennsylvania R. R. Co. has placed an order with Smith & Robinson, naval architects, for the construction of two modern grain barges, each with a capacity of 30,000 bushels, to be finished in four months. This is the railroad company's reply to the importunities of the Commercial Exchange that the Pennsylvania Railroad increase its grain-handling facilities. Vessels ordered to load grain at Philadelphia were subjected to long delays, and as they were under time charters each day's delay meant the loss of much money to the charterers.

These barges will be 150 feet long, 25 feet wide and 13 feet deep. They will be built at the yard of J. H. Mathis & Co., Cooper's Point, Camden.

ELEVATORS AT OMAHA.

The report of Secretary McVann of the Omaha Grain Exchange states that the growth in the receipts of grain at Omaha has naturally brought about a corresponding increase in the facilities for taking care of the business. All of the elevators planned during the first and second year of the existence of the Exchange have now been completed and are in active operation. Following is a list of all the elevators and capacity at present in operation in Omaha, South Omaha and Council Bluffs: Omaha Elevator Co., 1,500,000 bushels; Nye-Schneider-Fowler Co., "C," 1,000,000; Independent Elevator Co., 1,000,000; Merriam & Holmquist Co., "A," 600,000; Trans-Mississippi Grain Co., 500,000; Updike Grain Co., 500,000; Gate City Malt Co., 300,000; Merriam & Holmquist Co., "B," 125,000; Nebraska-Iowa Grain Co., 125,000; Crowell Lumber & Grain Co., 125,000; M. C. Peters Mill Co., 100,000; Cavers von Dorn Elevator Co., 50,000; Droege Bros., 50,000; J. F. Twamley, Son & Co., 40,000; Nebraska Hay & Grain Co., 25,000; total, 6,040,000 bushels.

Of these 6,000,000 bushels of storage capacity, it is well to note that over 5,000,000 bushels are the property of local grain dealers, but one elevator being owned by a railroad. This fact speaks eloquently of the faith that the great grain firms of the section have in the import-

ance and permanence of the Omaha market. Three of the elevators, the Updike "B," Merriam & Holmquist "A" and the Trans-Mississippi Grain Co. are "regular" public storage warehouses, which may be used for the handling of contract grain.

POLITICS AND BUSINESS.

Mayor Reyburn of Philadelphia is peculiarly the constituted champion of the ancient American doctrine of the separation of the powers of state and national governments. Needless to say, the Mayor of Philadelphia and the President do not agree on all points; but the Mayor talks his ideas on most public occasions; and so at the recent sixth annual banquet of the Retail Grain Dealers' Association, held at the Alexis Club, Broad and Jefferson streets, he asserted that politics were not to be construed as something disgraceful, but were really the science of government. In this manner he managed to support his previous utterances against the policy of centralized national government. In positive terms he asserted that it was the duty of every citizen to study the government of the city, state and nation so as to know the powers of each of these governments.

"We must face these problems," said the Mayor, "and decide as individuals as to the course we shall follow. We must first of all remember we are Philadelphians and strive for the betterment of our city. To attain the best results we must know just what are the powers of the city so as not to have any of its rights assumed by the state, or any of the rights of the state taken by the national government. We must emulate the example of our forefathers who acted as individual men. These forefathers of ours, arrayed as they were against savages, wild beasts and the many dangers of the wilderness, asserted their manliness. The same dangers do not surround us to-day, but ones just as harmful do, and it is our duty to face them manfully."

There were about two hundred persons present at the banquet. Augustus F. Daiz acted as toastmaster, and in addition to Mayor Reyburn, addresses were made by Edmund J. Shaunce, president of the organization; ex-Mayor William B. Smith, Edmund E. Delk, vice-president of the Commercial Exchange; Assistant United States Treasurer Joseph Bosier, and others.

FORECASTING.

Present conditions, however strongly they may lend themselves to laying a foundation for extreme pessimism over new crop prospects, are by no means in such a state as to preclude the possibility of a fair return this season, says the Minneapolis Market Record. There is yet time for the wonder-working of nature to come to the rescue, and it is still a question whether speculation has not taken in about all the slack that the situation warrants. The present is always a basis for forecasting; as this is somewhat gloomy owing to the remarkable spell of weather the world has experienced, we find prices reflecting the apprehension in a higher range.

The Wall Street Journal, in commenting upon the present nervousness, says:

"Even the possibility of an unfavorable start in a season of growth, such as this country is now experiencing, sets men's minds at work forecasting the future on this or that condition of change.

"The burden of this adjustment falls most largely upon the speculative trades, whose function it is to forecast changes, from whatever source they may arise. It is this responsibility that now makes crop conditions a matter of the most vital interest to everyone directly concerned. Indirectly the whole financial world must measure its projects by the outcome of the crops.

"Fortunately for all concerned, modern agriculture has become so complex in its crop systems, and so widely extended geographically, that no single climatic condition in any one portion of the world can affect more than a minor portion of the whole. Wheat, for instance, is grown in surplus quantities in every one of the five great continents. Localities as far apart as the United States, Europe, Argentina, Australia and India have probably not one chance in a hundred to share the common misfortune of a wheat harvest failure. Where one may lose the other is quite as likely to gain, and so there is everywhere an equalizing process which results in keeping up the average yield."

The Interstate Commerce Commission ruled on May 4 that the Great Western in Council Bluffs, Omaha and Kansas City will be allowed to establish a tariff granting an elevator allowance to the owner, of three-fourths of a cent on 100 pounds on all grain shipped out of Council Bluffs.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Federal Court on "Futures."

It is the public policy of the United States, says the United States Circuit Court of Appeals, eighth circuit (Cleage vs. Laidley, 149 Federal Reporter, 346), to suppress wagers, but it is also its policy to enforce the obligations of valid contracts; and one who would avoid his agreements and escape his obligations by his own wrong should be required to establish it by clear and convincing proof.

Contracts for the future delivery of grain and other personal property are lawful and valid. The legal presumption is that the parties who make them intend to perform them, and the burden is on him who avers that the illegal intention of one or more of these parties has made them void to establish his allegation by plenary proof. An intention by one or both of the parties to sell such an agreement, or their rights under it, before the time of delivery, does not avoid it. Parties have the same right to buy contracts for the future delivery of personal property with the intention of selling them that they have to buy the property with such an intention. An intention to discharge a contract for the future delivery of personal property by set-off or by ringing off under the rules and practice of the Board of Trade and by the payment of differences is not illegal, and does not render the agreement void. The intention not to receive grain unless forced to do so to protect his contracts to which the defendant testified was consonant with the lawful intention to sell like quantities of grain and to settle his obligation as far as possible by set-offs and by the use of rings, so that he would be obligated to receive but little or none of the commodities.

From the lawful contracts the legal presumption arose that the parties thereto intended in good faith to perform them. But the court holds that the intention of the parties to a contract for the purchase and sale for future delivery of grain to discharge their obligations under it by the payment by one of the parties to the other of the difference between the contract price and the market price of the commodity sold, and never to make or accept any delivery, renders the agreement a wager and makes it void.

Knowledge Rendering Liable Buyer of Grain from Tenant.

In an action by an owner of a farm against a buyer of corn from a tenant who had failed to pay his rent, the jury were instructed that in such cases the landlord is only required to show that the crops were grown by a tenant on his premises; that the rent was unpaid, and that the purchaser had knowledge that they were grown on leased premises.

The Kansas City Court of Appeals holds (King vs. Rowlett, 96 Southwestern Reporter, 493) that this instruction was erroneous. It says that in such cases the landlord is only required to show that the crops were grown by a tenant on his premises; that the rent is unpaid, and that the purchaser had knowledge that they were grown on leased premises. The fault of the instruction was that it required the plaintiff to show that the defendant knew that the corn had been grown upon his premises. Such is not the language of the Missouri statute and the holding of the appellate courts of that state.

Again, the court says that the plaintiff contended that under the evidence he was entitled to a verdict on the ground that he showed that the corn was grown by the tenant on his premises; that the rent was unpaid, and that the defendant knew that the corn was raised on leased premises. The defendant understood, when he bought the corn, that it was raised upon rented premises, but not upon those of the plaintiff. This raised the question whether or not the defendant's understanding, at the time he purchased and paid for the crop, that it was raised by the tenant upon leased premises other than those of the plaintiff, exonerated him from liability to the plaintiff. The court thinks not. He had such knowledge as under the statute rendered him liable to the plaintiff for the value of the crop he purchased from the tenant. He was not permitted to excuse himself from liability on the ground of his mistake in that respect, as the statute fixed his liability upon the fact of his knowledge that the crop had been grown upon leased premises.

As to the plaintiff's further contention that the defendant was liable on the ground that his hired

man knew, at the time he received the corn, that it was grown on the plaintiff's premises, the court says that as the hired man's duty was limited to weighing and receiving the corn, it does not think his knowledge is to be imputed to his master.

ARBITRATION DECISIONS.

The following decisions in arbitrations have been rendered by the arbitration committee of the Kansas Grain Dealers' Association:

The Coats Grain Co., Wichita, Kan., vs. Kelly Bros., Corwin, Kan.—In the above entitled cause it has been shown that while defendant was in plaintiff's office the said plaintiff purchased from defendant 5,000 bushels of corn to be loaded at Hazelton, Kan., and shipped to Colorado via the A. T. & S. F. Ry., during the month of November; that a written contract of this purchase and sale was made and signed by both parties; that the defendant defaulted and failed to ship any grain within the time specified; that the plaintiff extended the time and warned defendant that loss would result unless shipment was made; that defendant promised shipment would be made within the extended time; that defendant again defaulted, and plaintiff found it necessary to go into the market and try to buy for defendant's account a sufficient quantity of grain to fill said contract; that plaintiff succeeded in buying a part of this grain at 2½ cents per bushel loss and a part at 3 cents per bushel loss, and being unable to obtain the balance to equal advantage, he succeeded in cancelling the remainder at 3 cents per bushel; that this extra effort in the interest of the defendant cost plaintiff \$6.35; that the total loss to plaintiff amounted to \$1.50, which loss defendant refused to pay, alleging that the condition of the weather and shortage of cars prevented shipment, and that settlement would be made on a basis of market value east and submitted Wichita market quotations to sustain his contention.

Rule 12 of our National Trade Rules reads: "The word 'terms' shall mean that the weights and grades of a shipment shall be determined in the market agreed upon at time of sale." The confirmation in this case specifies that the destination should be in Colorado and that destination grades should govern. Hence, it naturally follows that if Colorado inspection shall govern the grade, the Colorado market must necessarily determine the difference in value between the contract price and the value of like grain at the close of the extended time limit of this contract, and that the only market to be considered in this case would be the market to which the grain bought was to be moved.

Further investigation of the evidence presented shows that Hazelton, the point at which this grain was to have been loaded, is one of a limited number of stations that enjoy exceptionally low rates to Colorado and that because of the Colorado demand, grain loaded and shipped from these stations enjoying this favorable rate was much higher relatively than the general markets would indicate or allow. Evidence further shows that to have bought in this grain from stations not enjoying this favorable rate would have resulted in greater loss than it now is.

This committee does not believe that the condition of the weather or shortage of cars was a valid excuse for defendant's failure to fulfill contract, and inasmuch as the evidence shows that the plaintiff bought in a part of this corn and canceled the balance at as low and favorable price as could be obtained, it is the opinion of this committee that the plaintiff is entitled to the full amount of its claim of \$150 and that said amount should be paid to plaintiff by defendant and the costs of this arbitration, amounting to \$5, shall also be assessed against said defendant.

Witness our hands this 12th day of April, 1907.

I. A. PRIBBLE,
C. A. SMITH, Committee.

The C. B. Gaunt Grain Co., Wichita, Kan., vs. Teichgraber Bros., Gypsum City, Kan.—In the above entitled cause it has been shown that the plaintiff sent out a line of card bids and that each of these cards specified that the bid was subject to Wichita weights and grades, and that shipments of lower grades would apply at certain discounts.

Defendant accepted one of these card bids for 5,000 bushels of wheat; confirmations were exchanged, the grain was shipped, officially inspected and one car graded No. 4, testing 58½ pounds.

It was unloaded, and in making returns the plaintiff deducted 4 cents per bushel, as card bid provided, on the car that graded No. 4. To this grade and application defendant objected and refused to pay the overdraft which resulted, alleging, first, that the wheat was all from the same bin and, therefore, all should have graded No. 2; and, second, that it was the buyer's duty to advise the shipper what this shipment graded and to get

shipper's consent to its application before unloading the same.

Rule 3 of our National Trade Rules plainly reads: "The acceptance of a card bid shall carry with it a full acceptance of the written and printed conditions contained therein."

Rule 12 further reads: "The word 'term' shall mean that the weights and grades of any shipment shall be determined in the market agreed upon at time of sale."

This committee is able to find nothing in any portion of the Trade Rules that would indicate any necessity for the buyer to notify the seller of any shipments misgrading or of the basis of its application on contract when the card bid plainly specifies that lower grades shall be applied either at fixed discounts or "market difference," but on the contrary finds that such is not necessary, because, as stated in Rule 3, "acceptance of a card bid shall carry with it a full acceptance of the written and printed conditions" of such card bid, and the statement on a card bid that off-grade shipments shall be applied either at some "fixed discount" or the market difference, must certainly be considered one of the essential conditions.

Nevertheless, this committee, in its effort to reach a just and equitable award, has made special inquiry regarding the customs which govern in many of the larger markets, and from this inquiry finds that it is not customary nor necessary; for the buyer's card bid provides that shipments misgrading shall be applied either at a fixed discount or the market difference. Neither is it necessary nor customary for buyer to obtain seller's consent to the basis of application either at a fixed discount or the market difference, such basis having been agreed upon and consented to by both parties at the basis having been agreed upon and consented to by both parties at the time the card bid was made by the buyer and accepted by the seller.

Upheled, therefore, by our National Trade Rules and the customs of the trade in our general markets, this committee cannot do otherwise than to award judgment against the defendant and in favor of the plaintiff in the sum of \$14.40, the amount asked, and assess the cost of this action, amounting to \$5, against the defendant.

Witness our hands this 12th day of April, 1907.

I. A. PRIBBLE,
C. A. SMITH,
A. H. BENNETT,
K. G. D. A. Arbitration Committee.

APRIL CROPKILLERS.

"Crop killing," thus far in the present year, has been carried on with a vigor rarely known before, says the Chicago correspondent of the New York Evening Post of April 19. It has started so early and has been so actively and so persistently pursued, that one of the oldest crop experts in the trade, who has been at the business for more than twenty years, reported to his principals that he was personally out of date. "Discharge your expert and get a prophet," he urged. Discussing some of the reports lately sent out by experts, who are in many instances men who know nothing of crops, this same man said: "Some of the reports sent out have been criminal."

Everyone has heard stories of the "green bug's" ravages. And, in fact, the appearance of millions of such insects, known as the aphis, or oat louse, has puzzled both the experts and the trade. Mild weather last winter was favorable for their development. They started in Texas and devoured the crop of wheat and oats in that state, and moved north through Indian Territory and Oklahoma and destroyed most of the crops there, the damage to wheat in Oklahoma being 35 per cent. Snow placing it at 75 per cent. In Kansas, 10 per cent loss is a liberal estimate to date.

In 1890 the "green bug" started in Texas in the middle of April, and worked north to the Iowa state line in Missouri, and as far north in Indiana as Indianapolis. The crop was so largely cut down that year that the price advanced from 77½ cents a bushel in April, to \$1.08½ in August, the yield that year being only 399,000,000 bushels. The visible supply in April of that year was 26,000,000 bushels, or half of that now reported. In making a comparison with seventeen years ago, however, allowance must be made for an increased consumption, which is 150,000,000 bushels a year larger than in 1890.

An allowance of 30,000,000 to 50,000,000 bushels will cover the damage that has been made to the winter wheat crop so far. What will happen between now and harvest is dependent upon climatic conditions. They make the crop.

J. N. Barncard, chief inspector of grain at Minneapolis, says if the farmers do not mix durum wheat with spring wheat much higher grades can be secured.

IN THE COURTS

The Chicago Real Estate Loan and Trust Co. has applied for a receiver for the Corn Products Co., "an \$80,000,000 corporation." A conspiracy in violation of the anti-trust law is alleged to exist, and upon this basis the action is taken.

For alleged failure of contract in building certain elevators for the Farmers' Grain and Supply Co. of Spokane, Wash., suit has been commenced against E. A. Oliver for \$2,205.25 damages. It is asserted the buildings were not constructed according to plans.

On April 16 the Wisconsin Central Railroad and two of its officials were found guilty of giving rebates. Burton Johnson, the general freight agent and G. T. Huey, the assistant general freight agent, were the officials. Seventeen counts were returned against each of the defendants.

Suit was instituted by the McLemore Grain Co. at Nashville, Tenn., on April 30, against the Marshall & Michel Grain Co. of Kansas City, to recover for a carload of corn it was asserted was purchased but not received, and also to recover for corn which it is alleged was not in good condition.

Judge Lochren of the Federal Court at Minneapolis, fined the W. P. Devereaux Co. of that place \$1,000, upon the latter having plead guilty to one count in the indictment against it for receiving rebates on grain. The other count were dismissed upon the action of the company in its plea of May 3.

Circuit Judge Allen of St. Louis, Mo., dismissed the claim of J. Garnett Atwater of Jacksonville, Fla., against the A. G. Edwards & Son Brokerage Co. and a counter claim filed by the latter because he held that the buying and selling of stocks and bonds on margins constitutes a gambling transaction. The issues were taken from the hands of a jury. Atwater alleged that on April 27, 1901, he opened an account with the Edwards company, which agreed to buy and sell stocks for him subject to his orders. The account continued to November 11, 1902. On that date, Atwater alleged, the company owed him a balance on the account of \$4,278.95. The defense claimed it was a gamble.

John A. Adams, of the Adams Grain and Commission Co., Milwaukee, Wis., was arrested early in April by the federal authorities on a charge of using the mails to defraud. The testimony introduced at the hearing tended to show that the defendant had not conducted a bona fide commission business, but that he had offered farmers in Illinois and other states prices in excess of the market price for produce, which, upon being shipped to him, had been sold for whatever price could be secured, the shipper receiving nothing for his produce except the promises of Mr. Adams. Three of the women employes who worked for the defendant were in court and testified as to the business customs of their employer.

On April 30 the Supreme Court of Wisconsin affirmed the decision of the lower courts in the case of Homer T. Fowler against the Metzger Seed and Oil Co. Fowler sued for payment on some flax he claimed to have furnished the seed company, his claim amounting to between \$10,000 and \$12,000. The company refused to accept the flax and plaintiff sued for the amount claiming that he was damaged in that sum. The Metzger people put in a counter balance for about \$4,000 for money alleged to have been advanced to Fowler to purchase the flax with. The case was tried about a year ago in the Superior Court and the Metzger people won out in both claims and the Supreme Court affirms this decision. The Dakota Elevator case which at first came up with the Metzger action will be tried separately.

Petitions in bankruptcy have been filed by several creditors against the A. P. Aldrich & Sons Grain Co. of East Braintree, Boston, Mass., the Amber & Hobart Co. and the Fowles Arlington Mills, all of which are alleged to be closely allied and insolvent. Judge Dodge appointed Attorney Frank O. White as receiver. Attorney Rogers Dow represents the creditors and Harvey H. Pratt the respondents. The three companies are the parties who attracted the attention of the post-office inspectors last year with their circulars promising 15 to 20 per cent dividends per month on invested capital. They bought grain at the wholesale rate, and advertised to sell in any quantities, and pay big dividends. The act of bankruptcy in each case is that \$1,000 was paid to S. A. Bennett on May 1, with intent to make him a preferred creditor. The Aldrich Co. was formerly a member of the Boston Chamber of Commerce and has been in business for about two years. Allen P.

Aldrich is named as the president. The company was first capitalized at \$50,000, but this was later increased to \$150,000. The stock is rated at \$100 a share. Of the total issue it is believed that about \$140,000 has been paid in.

Early in May Zeller & Co., grain brokers of Chicago, sought to attach Joseph Leiter. Zeller & Co. got a verdict against Leiter for about \$70,000 on claims arising out of notes he gave to secure them against loss when he was in wheat. He has appealed from that judgment, but some weeks ago an order was issued directing him to appear for examination in supplementary proceedings on account of his failure to satisfy the judgment.

By the decision of Judge Dupuy of the Superior Court in session at Chicago the Board of Trade and Stock Exchange won a legal victory on May 8. The court ruled that prevailing methods in dealing with bona fide contracts on the basis of margins were within the scope of the law, and the decision upheld the closing out of trades when additional margins were demanded and refused. Dr. Waldo P. Johnson, a dentist, sought to recover stock valued at \$7,500 from Charles E. Milmine and Milmine, Bodman & Co., brokers. He alleged the transaction was of a gambling nature and therefore the stock should be returned to him. The deal was consummated through Jerome Probst in February, 1906, and upon the failure of the latter to advance additional margins when demanded the trades were closed out. The court on the points involved said: "The statute does not prohibit a bona fide contract of sale and purchase of grain where the delivery is to be made within a future month, the day of delivery at the option of the vendor. A contract of this character will be held void if it appears that at the time the same was made it was the intention of both parties that no delivery of the commodity should take place, but that the transaction should be settled by adjusting the differences. In order that a contract must be void on this account, it must be the intention of both parties existing at the time the transactions were entered into that there should be no actual delivery of grain, but a mere adjustment of differences. If either party acted in good faith in making such contract, intending at the time of the making of the contract that there should be delivery, the contract will be valid." Judge Dupuy's decision was long and intricate, but he was satisfied that the certificates involved were held as collateral and not as margins, and that, after due and sufficient notice under the rules of the Board of Trade, the brokers were entitled to sell the same and reimburse themselves. The court also held that, if they were not gambling transactions, and if Milmine, Bodman & Co. had no actual or constructive notice of the rights of the complainant, Johnson, they are entitled to assert their lien, and that anything which might remain after the satisfaction of their indebtedness belongs to Dr. Johnson, owner of the certificates.

LADYBUG SAVING KANSAS GRAIN.

The campaign in Kansas and Oklahoma to exterminate the green bug, which has been doing much damage to wheat, is developing interesting features, says a Kansas City telegram of May 5. The main effort is being directed in the collection and distribution through the affected districts of the ladybug, so called, which Prof. S. J. Hunter, entomologist at the Kansas State University, recently discovered to be the parasite enemy of the destroying green bug.

Since Professor Hunter became convinced of the worth of the ladybug as an exterminator he has kept a number of students from the university in the fields collecting these insects. The bugs have been brought into the university at Lawrence, packed and shipped free to any point where they are needed, and in two weeks thousands of these destroying parasites were sent out over the state. They showed quite wonderful results and the demand for them increased beyond the supply. Concerns vitally interested, impressed with the great good accomplished, raised money voluntarily and forwarded it to Professor Hunter to aid him in his work.

The work of extermination was temporarily delayed by the extreme cold weather, which brought out the fact that, while a low temperature and cold rains killed off the ladybug, the green bug thrived on these conditions. When warm weather came into sight, renewed efforts were made to spread the ladybug, and Gov. E. W. Hoch of Kansas, the Kansas City, Mo., Board of Trade and several southwestern millers gave financial support to the campaign.

Send us the grain news from your neighborhood.

CROP REPORTS

The cold is reported to have damaged the crops in Indiana.

Predictions are made that the grain crop of Nebraska will prove to have been greatly benefited by a snowfall late in April.

It was reported at Granger, Texas, on April 25, that the acreage in small grain promises an average yield. Corn was in fine condition.

In Iowa, Director Sage of the crop reporting bureau says many of the farmers have reseeded their oats. April was a cold month, one of the coldest ever known in the vicinity of Des Moines. Much damage to crops resulted from freezing.

Secretary of Agriculture James Wilson, who visited Chicago on May 7, said: "Taken as a whole, I see no cause for complaint, and I think it will be found when threshing time comes around that all this cry of crop damage has been made for a purpose."

The Kentucky May report shows the wheat condition to be 89 per cent, or a drop of 10 per cent from the condition in April, and 8 per cent below that of a year ago. It is said the acreage sown last fall is 10 per cent short. The condition of rye is 88, against 93 last month.

Some of those persons in the trade who keep in touch with the flax situation believe the acreage of that crop will be larger this year because of the inability to get in the usual wheat area. The Duluth Commercial Record says, "People looking for a big increase in the flax area, or any increase, are liable to a severe jolt."

All the crops in Tennessee will be late. Corn was harmed by the cold, but much can be replanted. The late wheat is recuperating from the frosts, but that sown early was seriously damaged. The acreage shows an average of 85 per cent, and the condition 81 per cent, according to the state report for April. Some of the damage was due to green bugs.

From the Canadian Northwest comes the report of abnormally late seeding. As late as the second week in May all advices were of the same tenor, and wintry conditions were prevailing. President Pettit of the Peavey Grain Co. is quoted as saying some of the districts could not be seeded until after the 15th. He believed there would be a considerable decrease in the acreage unless the weather changed. B. W. Snow and others express a similar view.

A report from St. Paul, Minn., on May 5, said farmers throughout the northwestern states are looking for a bumper crop of grain this year. The inclemency of the weather has greatly delayed seeding. Probably not more than one-third of the usual acreage has been seeded in Manitoba, while in North Dakota, northern Minnesota, and northern South Dakota, the percentage has been somewhat greater, but is still far below the normal for this time of year. The ground is full of moisture, but a few days' warm sunshine will put it in splendid condition for the reception of the seed.

The Missouri May crop report showed a condition of 82 per cent for wheat, compared with 94 per cent for April, and 87 per cent for May, 1906. It was stated the damage was greatest in the southwestern part of the state, due to freezing and dry weather, though the green bugs did some damage. The wheat has turned red and the bottom blades are covered with rust. An acreage of 2,281,000 acres is given, or 2 per cent more than previous crop. Oats have a condition of 75 per cent, against 73 a year ago, and the acreage is 3 per cent larger. The corn acreage is about the same as last year, though one-eighth more was planted in April than a year ago.

According to the May report of the Ohio Department of Agriculture, clover has been damaged to some extent by freezing. Wheat prospects are now estimated at 74 per cent, compared with an average, a decline of 13 per cent since the report issued by this department March 1st. The past month, with its freezing weather and cold rains, has been most severe on the wheat plant, hence the decline in prospect. But four counties in the state now report wheat prospect at an average or better. Correspondents, generally, note its unpromising condition, and in many sections of the state a large percentage of the original area seeded will be, or has been, plowed up and put to other crops. The damage reported by the Hessian fly and other insects is of little consequence. As the original area seeded to wheat was below a

good average, and deducting from this the area that will be plowed up, Ohio's wheat harvest this year will necessarily be far below a full average crop.

C. U. Topping, secretary of the Oklahoma Millers' Association, said on April 30, the green bugs had damaged the crop 50 per cent, but they had practically ceased working in the south half of the territory and were doing very little damage in the northern part.

F. D. Coburn, secretary of the Kansas Department of Agriculture, says in his report of April 29, "The close of April exhibits Kansas with an empire of growing wheat, somewhat beset in places, but bravely waving salutes to her unfailing sunshine and showers whose alchemy transmutes them into gold. The unfavorable conditions for wheat have likewise been detrimental to oats, and where these crops sustained most damage and promise least, larger areas of corn would be expected, although the general returns at this time do not presage that a more than ordinarily large acreage will be planted." Extracts from the report show that only one of the 1,000 correspondents in the state mentions the Hessian fly. The green lice were present to a greater or less extent in 36 counties—doing in some considerable damage and in others none. These counties are in the southeastern part of the state. The acreage sown is 6,500,000 acres while last year it was 6,239,041 acres. This in the main safely passed the perils of winter. The continuous warm, growing weather of early spring caused it to advance remarkably, and it was unusually forward and flourishing, but later unfavorable circumstances have changed the situation. The high conditions prevailing everywhere three and four weeks ago have in a major portion of the wheat territory been lessened somewhat each day since by the abnormally cold April, including several severe freezes, a lack of the rains which would have sustained or promoted its vigor, and, in various southern counties, damage inflicted by myriads of the green lice reported so harmful in Texas and Oklahoma.

The May crop report says: "The average condition of the growing winter wheat crop on May 1 was 82.9, compared with 89.9 on April 1, 90.9 on May 1, 1906, and 85.5 the mean May average for the last ten years. The area remaining in cultivation May 1 was 28,132,000 acres. This is 11.2 per cent, or 3,533,000 acres, less than the area sown last fall, and 5 per cent, or 1,468,000 acres, less than the area harvested last year. The following table, covering the eleven principal winter wheat states, shows the area sown, the area remaining and the condition, compared with that of last year and a ten-year average:

| | Percentage Abandoned Acreage. | Acreage Remaining. | Condition | | |
|---------------|-------------------------------------|-----------------------|-----------------|-----------------|-----------------|
| | | | May 1, 1907. | May 1, 1906. | 10-Yr. Aver. |
| Kansas | 4.8 | 5,645,000 | 82 | 87 | 87 |
| Indiana | 15.0 | 2,362,000 | 74 | 94 | 77 |
| Missouri | 4.5 | 2,213,000 | 81 | 89 | 85 |
| Ohio | 15.0 | 1,882,000 | 74 | 94 | 80 |
| Nebraska | 1.5 | 2,213,000 | 91 | 92 | 93 |
| Illinois | 5.5 | 2,228,000 | 88 | 88 | 80 |
| Pennsylvania | 2.5 | 1,618,000 | 92 | 96 | 88 |
| California | 18.0 | 1,368,000 | 79 | 89 | 84 |
| Oklahoma | 35.0 | 803,000 | 72 | 93 | 88 |
| Texas | 70.0 | 380,000 | 43 | 91 | 82 |
| Michigan | 8.8 | 878,000 | 75 | 78 | 78 |
| United States | 11.2 | 28,132,000 | 82.9 | 90.9 | 85.5 |

The percentage abandoned, the area that went to harvest and the final yields as compared with the indicated yield for 1907 are shown below.

| Per Cent Aban- doned. | Area Aban- doned. | Area. Harvested. | Final Yield, Eu. |
|-----------------------------|-------------------------|---------------------|---------------------|
| 1907..... | 11.2 | 3,533,000 | *28,132,000 |
| 1906..... | 6.0 | 1,472,000 | 492,488,000 |
| 1905..... | 4.6 | 1,432,000 | 29,724,000 |
| 1904..... | 15.4 | 4,932,000 | 325,375,000 |
| 1903..... | 2.8 | 964,000 | 33,108,000 |
| 1902..... | 15.2 | 4,868,000 | 401,656,000 |

*Indicated.

The indicated wheat crop as figured by states shows a slightly larger total than indicated above. This arises from inaccuracy of the figures used as a basis for acreage, mainly in those states where both winter and spring wheat are raised.

Mills in the Northwest consumed 1,000,000 bushels more wheat in March than they did during the same month last year.

At the Society of Equity meeting at Fargo recently, the farmers interested in that association decided to cease giving the assessor information regarding the number of acres which they planted in wheat last year and the number they expect to plant this year. In the discussion it was pointed out that, as there is no penalty attached to the law requiring the gathering of such information it is practically a dead letter. Moreover, the statistical reports regarding the crop acreage, gathered by the assessors all over the state and compiled at Bismarck, are, it was asserted, of no benefit to the farmers, but are simply used by speculators to manipulate the market.

Canada and most European countries. Upon the continent of North America its cultivation is chiefly confined to the Dominion of Canada, where it is grown as a garden crop and as a companion to corn for silage purposes. This plant requires a long, cool summer, and because of the intense heat and protracted periods of drought characteristic of most quarters of the United States, it does not thrive in this country.

Kidney, or Haricot, Beans.—Kidney beans, known also as Haricot beans, and technically as *Phaseolus vulgaris*, are the common field and garden beans of America. They also enjoy the distinction, so far as records carry evidence upon this point, of being native to the New World. It is the cultivation and uses of this class which are to claim our attention in the present publication.

Lima, or Sugar, Beans.—The plants of Lima, or Sugar, beans (*Phaseolus lunatus*) are normally rank-growing climbers, although within recent times a dwarf, nonclimbing variety has been developed. They thrive best on strong, well-enriched lands and under tropical or subtropical conditions.

Dolichos Beans.—Two familiar examples of the Dolichos group of beans, which differ slightly from the common beans, are known as the Hyacinth bean and the Asparagus, or French Yard Long, bean.

Soy Beans.—The soy, or soja, bean (*Glycine hispida*), while for generations known and much appreciated in Japan, is a comparatively recent introduction into the United States, and its cultivation has not as yet become general. In Japan it is a valuable food for man as well as for stock, but in the United States it has received little attention for purposes other than the production of forage for cattle and swine. It is destined, however, to become a very important agricultural product in many sections of the United States, both as a grain and forage crop.

Scarlet Runner Beans.—The Scarlet Runner bean (*Phaseolus multiflorus*) is a strong-growing climbing plant, used for decorative purposes on account of its clusters of bright blossoms and the high color of the matured pods, which give it an ornamental value of no mean significance.

Velvet, or Banana, Beans.—The Velvet, or Banana, bean (*Mucuna utilis*) is one of the most exacting members of the bean family as regards temperature, and as a result in the United States it can only be grown successfully within comparatively narrow limits. In Florida and along the Gulf coast it has in recent years become an important forage as well as green-manuring crop. In those sections of the United States where it can be successfully grown it is a worthy competitor of the cowpea and soy bean.

Cowpeas.—The cowpea (*Vigna sinensis*), because of its bean-like seed and habit of growth, its great economic importance as a forage crop for the production of hay and silage, and its great value as a green manure, should be mentioned in connection with the other plants to which it is so closely related both botanically and economically.

FIELD AND GARDEN GROUPS.—For convenience in reference and for discussion, beans may be divided into two general groups—"field" and "garden" beans—which are by no means distinctly separate either in appearance or in characteristics. Each of these groups can again be divided into bush and pole beans. Bush beans of the field type are recognized, for commercial purposes, under three well-marked types, known as Kidney, Marrow, and Pea beans, each of which may be subdivided into two groups, colored and white. The garden beans, like the field beans, may be divided into bush and pole types; these again into Kidneys and Limas, the term "Kidney" in this case including all of the common garden beans, whether of one type or another, and this group may again be divided into wax and green pod. The same subdivision may also be recorded under pole beans.

ACREAGE GROWN.—There are no statistics available from which to determine the acreage or quantity of beans produced as field beans and as string and garden beans. The census for 1900 gives the area of the bean crop, including both field and garden beans, as 453,867 acres, and the total product is placed at 5,064,844 bushels, an average of 11 1/5 bushels per acre. The total amount received by the producers for the crop was \$7,634,262, or an average of \$1.51 per bushel. In considering this average it must be remembered that the total includes the products of good as well as of poor cultivators and embraces regions in which the crop was a practical failure, as well as those in which it was a success. For those states which make bean growing an important industry the average yield to the acre is somewhat higher than is recorded in this general average.

The three states which lead all others in the production of this crop are Michigan, New York

and California, followed by Wisconsin, Maine, Virginia, North Carolina, Tennessee, Missouri, Minnesota, Illinois, Kentucky, New Mexico and West Virginia. The other states which produce a considerable acreage of garden beans, with the exception of Florida, cultivate less than 3,000 acres. Florida is reported as cultivating 9,189 acres in 1899. The great bulk of this crop reached the market as snap or string beans. Those beans which were not marketed in this way were, of course, allowed to ripen and represent a small percentage of the total crop of dry beans. The states in which the great bulk of dry or field beans is produced are Michigan, New York, California and Maine.

The geographical distribution of this crop, as indicated by the census of 1900, is clearly presented in the accompanying map, which shows the counties in the several states where dry beans are grown commercially. This map shows the influence of climate in determining the regions to which this crop is adapted. The high latitude and the peculiar soil conditions of the New England states and of New York and the high latitude of Michigan, Wisconsin and Minnesota are equally suited for the production of this crop. Another region where there is considerable interest in the culture of this crop is along the Allegheny Mountains from southern Pennsylvania to northern Georgia. In the north-central part of California, in high altitudes, are also important bean-producing centers.

Within the last decade the cultivation of field beans has increased markedly in certain sections of the eastern United States, particularly throughout New York and Michigan. In many areas in these two states beans have become as much a staple crop as was wheat a quarter of a century ago. From an economic standpoint this is a valuable addition to the farm rotation of the region because of the ability of this crop to improve the land upon which it is grown. If for no other reason than this, the bean crop taking the place of wheat in the rotation would be an advantage to the community. Of late years, however, the bean crop has been a more remunerative crop than wheat, which adds a pecuniary reason for growing the crop to the soil-improving value previously noted.

While the distribution of field beans is to a very considerable extent determined by soil and climate, the production of garden beans is not so emphatically influenced by these factors. The quick growth of garden beans enables the truck farmer and the market gardener to take advantage of that portion of the year when the climate of the region is most congenial to the production of the crop, and for this reason the demands of the market as well as the location of the grower determine largely the area of garden beans to be grown in any particular locality. Shipping facilities, of course, have as marked an influence upon the distribution of garden beans for early market as upon any other truck crop.

A third role in which beans play an important part is that of a product for the canning factory. The production of fresh beans for canning purposes conforms more closely to the area in which field beans are produced than to that where garden beans are grown for early market.

From what has been said, it is evident that there are two important divisions of the bean industry in the United States, namely, the production of field or dry beans and the production of garden beans. The latter involves two industries: (1) The growing of beans for early market, and (2) the raising of string or snap beans for use by the canning factories.

(To be concluded.)

Superior, Wis., shippers have complained that the Great Northern and Omaha railroads are discriminating against them by leasing their elevators and thus making them private houses, closed to them.

Until barley has been stored for some little time, to undergo a kind of after-ripening, it does not attain its full germinating energy and power; but the same result can be attained by artificial drying, or at least so far as the former capacity is concerned, since the germinating power, or the actual percentage of corns capable of germinating, is a predetermined value and less dependent on the proportion of moisture present. By artificial drying the germinating energy of a fresh sample of barley can be increased from 19 to 34 per cent, and the germinative power in a smaller, though still decided, degree. In the case of barley rich in proteids and of a flinty character, the results are even more beneficial than where the converse conditions prevail, since the corns of the former circumstances, whilst drying loosens their texture and therefore require longer storage in ordinary type retain their moisture with greater tenacity, and prepares them for the absorption of the steeping water in malting.—Gambrinus.

BARLEY AND MALT

A few days since the Francis Perot's Sons' Malting Co. of Buffalo, N. Y., broke ground for the second structure it is building in addition to its plant. It is to be a fireproof malt house and will cost \$125,000. The plant started two months ago will cost \$120,000.

During the fore part of April the Interior Warehouse Co. of Dayton, Wash., shipped 550 tons of barley from Turner and Whetstone to New York. Another 500 tons was scheduled to follow at once. This order was purchased from warehouses in the vicinity, and the Warehouse company still holds in its own buildings some 50,000 sacks, 6,000 of which belong to the farmers. Owing to the lack of cars the price was reported dull.

VALUATION OF BREWING BARLEYS.

Dr. Adolph Clusz, in *Allg. Zeitschr. f. Bierbrauerei u. Malzfabr.*, gives a comparison between the methods now employed in Vienna and Berlin in the valuation of brewing barleys. The Vienna method, he says, endeavors to supplement the subjective examination by the judges with an examination of the barley according to objective viewpoints in the laboratory. In this connection the following elements of valuation are considered:

| | No. of Points. |
|--|----------------|
| 1. Hektoliter weight in kg..... | 3 |
| 2. Absolute weight (1,000 kernel weight of dry substance) in grams..... | 6 |
| 3. Plumpness in percentage of weight of the kernels remaining upon the 2.2 mm. mesh... | 4 |
| 4. Weight of husks in percentage of dry substance | 6 |
| 5. Solubility calculated according to Prior's formula | 6 |
| 6. Nitrogen content (proteid in per cent of dry substance) | 6 |

This is supplemented by valuation according to the following subjective characters:

| | |
|------------------------------------|---|
| 7. Color of the kernels | 3 |
| 8. Uniformity of the kernels | 4 |
| 9. Fineness of the husks | 6 |

There are then deducted for bad odor of the barley, 1; for damaged condition 1 to 2 points; for a proteid content in excess of 13 per cent in the dry substance, 2 points. Barleys with strongly pungent odor, badly damaged, or possessing over 14 per cent proteid are excluded in advance from competition for prizes.

According to the Berlin method, albumen content, color, uniformity of berry, shape of berry, fineness of husk, mellowess of berry, and purity of the sample are valued at from 1 to 9 points; but the albumen content is ascertained in an objective manner, while all other properties are left to the subjective judgment of the judges. From the total of these points, 0 to 24 points are deducted for each of the following properties: 1, damaged berries; 2, started grains; 3, bad odor, after which the reduced total gives the basis for the awarding of prizes. First, however, the albumen content is brought forward again by limiting the highest possible unreduced total by the albumen content as follows:

| Albumen Content. | Highest Possible Total. |
|--------------------|-------------------------|
| Above 14% | 10 |
| 13.1 to 14 | 17 |
| 12.1 to 13 | 24 |
| 11.6 to 12 | 31 |
| 11.1 to 11.5 | 38 |
| 10.6 to 11 | 45 |
| 10.1 to 10.5 | 52 |
| 9.0 to 10 | 59 |

Hence with an albumen content of 10.6 per cent the number of points of the seven positive elements of valuation must not exceed 45, and, if larger, are simply reduced to this number after deducting the penal points.

OBJECTION TO AMERICAN MALT.

Vice-Consul Cheney of Reichenberg has sent to the Department of Commerce and Labor a report of the proceedings of the Central Europe Economic Society of Austria, at whose meetings were discussed the trade relations between Austria-Hungary and the United States, in the course of which he says:

"Especially deserving of mention is the fact that American malt has scarcely any prospect of being favorably received in the European beer-producing countries.

"The quality of the barley is not the cause of rejection, since the malt consumers of Austria-Hungary know that the American farmers import

barley for planting from Hanna (a district in Moravia), recognized as producing the finest barley for brewing purposes. The dislike of the Austrian and of the German beer brewers for the American malt rests simply and solely upon the method of preparation, which is not acceptable to the consumers of middle Europe. The Austrian malt, which enjoys such favor from many sides, is dried on the threshing floor, while in America it is automatically dried in "drums." The malt consumers in Austria-Hungary state that the public do not like the taste of the beer prepared from "drum-dried" malt.

"A still greater obstacle which presents itself against the introduction of American malt into Austria-Hungary rests in the difficulty of the proper packing. Malt is strongly hydroscopic and one is, therefore, compelled, in order to avoid the damaging action of the water during ocean transportation, to pack it in cases lined with sheet metal, which adds not a little to its cost."

IMPORTS AND EXPORTS.

| Imports— | 1906. | 1907. |
|-----------------------------|-------------|-------------|
| Barley, March, bushels..... | 1,725 | 6 |
| Value | \$869 | \$12 |
| Nine months | 17,898 | 35,800 |
| Value | \$9,674 | \$12,809 |
| Exports— | | |
| Barley, March, bushels..... | 1,775,369 | 425,587 |
| Value | \$895,000 | \$251,225 |
| Nine months | 15,567,369 | 7,644,364 |
| Value | \$7,669,191 | \$4,184,083 |
| Malt, March, bushels..... | 33,013 | 25,479 |
| Value | \$22,290 | \$16,609 |
| Nine months | 749,233 | 275,031 |
| Value | \$503,799 | \$183,412 |

CURES BARLEY SMUT.

Prof. R. A. Moore, of the Agronomy Department of the University of Wisconsin, who has already done so much for improved barley culture in the Northwest, has added to the debt the farmers of this country owe him by finding a cure for barley smut.

Barley smut has given the farmers of Wisconsin an infinite amount of trouble and occasioned them large losses. Wisconsin is the third largest barley-growing state in the country, producing annually 15,000,000 bushels, California and Minnesota being the only two states that outrank it. Of this amount, it has been conservatively estimated that at least 7 per cent is destroyed each year by this disease. This represents a loss, estimated in money value, of close to half a million dollars.

Now, barley, it is found, is affected by two varieties of smut—the loose and the close, the former being the most prevalent and the hardest to eradicate. The loose smut is noticeable as soon as the barley begins to head. The little black heads will be seen pushing out from the sheath in which they are enclosed. For several days a black smutty mass is noticeable, completely destroying the spike and wafting its spores onto good heads of barley at a time when it can penetrate the seed where it finds lodgment. A few days after the smut makes its first appearance it will have been ripened and be wafted by the wind to begin its deadly work, which begins the next year after the seed affected is planted, and nothing will be noticeable except the slightly blackened tip of the barley plant where the spike should be.

Barley is less easily contaminated than are oats, but the formaline remedy for oat smut, discovered by Professor Moore, has been found to be ineffective for barley smuts. Professor Moore then tried the hot water treatment discovered and used for smuts by Prof. C. F. Jensen of Denmark in 1888, and further tested and modified by W. F. Swingle of the U. S. Department of Agriculture in 1898. The treatment used by Professor Moore has been a modification of the Swingle method. The barley is placed in gunny sacks and submerged for twelve hours in cold water for the purpose of softening the hull and the berry. It is then taken from the sack and left to dry and then submerged in a cask containing hot water, held at a constant temperature of 130 degrees Fahrenheit, for ten minutes. By having boiling water in a kettle or tank near at hand, the temperature can be regulated and held at 130 degrees. It has been found desirable also to warm the barley before placing it in the hot water, by previously submerging it in water at a slightly lower temperature. The seed after submergence is spread out upon the barn floor to cool before using.

The seed should be planted not later than the day following the treatment, otherwise it has a tendency to sprout and difficulty will be experienced in getting it through the seeder or drill.

The Society of Equity is going to have an annual "round-up" at Omaha on June 5-7.

HAY AND STRAW

There is some talk of establishing an alfalfa mill at Kirwin, Kan.

Hay was quite scarce at Duluth, Minn., early in May, and timothy commanded \$15.50.

The P. E. Drought Hay Co. of Kansas City, Mo., suffered a severe fire loss on April 16.

W. A. Pope recently purchased C. E. Randleman & Co.'s hay and grain store at Baker City, Ore.

The latter part of April baled timothy was quoted at \$24 on the St. Paul and Minneapolis market.

Early in May the price of hay at Rochester, N. Y., was quoted at \$23. Straw was selling at \$8 and up to \$11.

An increase in the capital stock of the Norton Alfalfa Mill Co. at Norton, Kan., is noted. The capitalization is now \$40,000.

J. W. Stauffacher of Atlanta, Ga., has been elected inspector of hay, grain and grain products by the Chamber of Commerce.

Woodlock Bros. & Co. suffered a fire loss in their hay and grain store at Chelsea, Mass., on April 15. The damage done was but nominal.

A report from Albert Lea, Minn., says hay is becoming very scarce as May grows older and the price is going up. The late spring is held responsible.

A hay warehouse belonging to Fred Morrison of Boyle City, Ill., burned on April 29 with 300 tons of hay and a hay press. The loss approximates \$8,000.

C. H. Peters lost his warehouse and 10 tons of hay and straw in a fire at St. John, N. B., on April 11. The damage will exceed \$1,400, the amount of insurance carried.

At New York, on May 10, it was difficult to get sufficient good hay to meet the demand. Prime hay will bring \$24 and \$25, while good No. 2 is up to \$22 and \$23.

J. E. Burbank & Co., hay and grain dealers of Cheney, Wash., have handled 3,000 tons of hay since July of last year. They assert their hay is superior to any other sold on the coast.

C. B. & F. H. Goss of Melrose, Mass., lost their hay warehouse and contents in a fire which occurred May 7. The damage was \$1,500 on the building and \$1,500 on the stock, covered by insurance.

Articles of incorporation have been issued the Meyer Hay and Grain Co. of St. Louis, Mo., which has a paid-up capital of \$12,000. H. F. Grundmann, H. F. Meyer, Louis Essig and others are interested.

Incorporation papers have been issued the Wheatley Hay, Grain and Lumber Co. of Boston, Mass., which is capitalized at \$25,000. The president is William Wheatley and Walter N. Randall is the treasurer.

A short time since the Colorado Alfalfa Meal Co. of Boulder, Colo., placed an order with the Nordyke & Marmon Co. for a complete line of machines, power connections, etc., for a large alfalfa meal plant which is being installed at that place.

Incorporation papers have been filed by the Mize-Tessier Grain and Hay Co. of New Orleans, La. It is capitalized at \$6,000, and will conduct a retail business. James S. Mize is president, Charles A. Tessier, Jr., is vice-president and W. M. Mize, secretary and treasurer.

Some thirty-six carloads of hay were burned up on April 28, when warehouses A and B of the Singer dock were destroyed at Duluth, Minn. A spark is supposed to have fallen from a workingman's pipe and started the conflagration. The loss is \$5,000 on the hay, and \$15,000 on the buildings.

At the Indiana State Experiment Station it was recently ascertained that clover hay makes an exceptional feed for fattening cattle. In this test the steers receiving the clover hay ration made the largest gains at least cost. While those fed on linseed meal finished as well, they did not make as good gains.

C. Z. Haskins, near Krupp, Wash., has demonstrated that alfalfa can be raised on the uplands without irrigation. Three years ago he sowed 12 acres of the best land on his ranch to alfalfa merely as an experiment and has now one of the prettiest fields in the country. A few weeks ago Mr. Haskins ran over the ground twice with a disc harrow, chopping it up thoroughly. As soon as the warm days came the spears began to shoot up and now the ground is thickly covered

with dark green, already being 3½ inches high. Only one crop can be taken off in one season, but after the harvest the stubble makes the best of pasture, the lack of which has always been a draw back to the Big Bend country.

At Pittsburg, Pa., the market was reported bare on all kinds of hay on May 10. Good prices will rule for the balance of May, but quite a movement of hay is anticipated early in June. There is an active demand for oat straw and good sound straw will sell well, even though the color is not so bright.

A complete mill for the manufacture of rice straw into paper pulp has been manufactured at New York. It is the first of its kind, and is now being hauled on a special train through the rice belt of Louisiana and Texas. It is destined to bring about a decided change in the method of making paper, besides affording a new use for rice straw.

The Ohio State Experiment Station states in a recent report that, "Alfalfa promises to be one of the most useful crops ever grown in Ohio; but the Brobdignagian stories which have been circulated about it are calculated to disgust the well informed and to lead the ignorant into error. The truth about alfalfa is good enough abundantly to justify the patient care which in most cases will be found necessary to start it successfully." A bulletin on alfalfa is now in preparation by the Experiment Station at Wooster, which will summarize the experience of some hundreds of successful alfalfa growers scattered throughout Ohio.

Freeman Bros. & Co., Chicago, May 11, say: The C. M. & St. Paul Railroad and the Chicago & Northwestern Railroad yesterday raised their embargoes against the shipment of hay for Chicago. This means you have now every opportunity of forwarding your surplus and realizing the excellent prices which are current here. The Chicago market is the highest in the country. The receipts here are nominal; tracks are cleared and the undertone to market is very strong. Do not delay but ship quickly; you will not regret it, for this is the chance of obtaining the top prices of the crop year.

According to Professor Plumb of the Ohio Experiment Station oat hay, in feeding value, is ranked as materially better than timothy, the former containing 4.3 per cent digestible protein and 46.4 per cent carbohydrates, compared with 2.8 per cent digestible protein and 43.4 per cent digestible carbohydrates in timothy. Naturally, the greener the condition of the oats when cut the poorer will be the crop in digestible food. The oat plant is one of the easiest to grow. The ground should be well disked or plowed and thoroughly harrowed and pulverized, to form a good seedbed. Then the seed may be drilled in with a regular two-horse drill, or sown broadcast and harrowed in. Better results should come from drilling in, as the seed will be more uniformly distributed and at better depth.

In a recent report Albert N. Hume, inspector in farm crops at the college of agriculture of the University of Illinois, says that alfalfa will not grow on soil that is not well drained; it simply will not grow there. He tells of having disked and harrowed the alfalfa grown at the university twelve times before seeding the crop. He says you must disc and harrow until the weeds are killed. This is a fundamental principle in starting alfalfa; and it must be remembered—weeds will kill alfalfa. There are many failures in getting alfalfa started due to the growth of weeds. The young alfalfa plant is very feeble and it cannot compete with weeds. The field that has yielded so well at the university was sown July 12, after the ground had been brought into a condition like a flower bed. This is the piece that yielded 6½ tons per acre of air dry hay last year. The practice at the university is to disk the alfalfa after every cutting, to split the crowns and to cause the roots to send up more stems. To thicken the growth, put in a little more seed and disk it under. This crop may well be put in after a crop of early potatoes has been harvested. In disking the alfalfa to split the crowns be sure that the cutters are sharp and the disk should probably be set at a less angle than is usual to tear up the ground; the disk should not be turned much.

The steamer W. B. Kerr cleared from Duluth on April 30 with the largest cargo of wheat ever put afloat on Great Lakes, 440,000 bushels. This is the Kerr's maiden cargo. The highest previous record was 378,000 bushels.

On April 24, Charles Henn's elevator at Barton, Ill., was burned at a loss of \$5,000, with \$4,800 insurance. It is thought the blaze originated from a spark from a locomotive. About 200 bushels of grain were lost. The elevator had a capacity of 20,000 bushels and will be rebuilt at once.

FIRES--CASUALTIES

Fire swept away the Peavey Elevator at Cryne, N. D., on May 1, together with 10,000 bushels of grain.

The grain warehouse of H. White & Co. at Hartford, Conn., was slightly damaged by fire on April 30.

Proog Bros.' Elevator at Berlin, Iowa, was burned down on April 27 at a loss of \$6,000. The plant was partially insured.

Fire destroyed the Home Grain Co.'s elevator at Ringwood, Okla., on April 12, with its contents. The loss reaches \$6,000, fully insured.

Samuel Eby & Son, grain dealers of Gap, Pa., lost their warehouse on April 22, because of an overheated stove. The approximate loss is \$10,000.

Albert Gammel, a young man employed in the Dorsey Elevator at Weatherford, Texas, caught his arm in the shafting on April 21, where it was horribly mangled and broken.

The careless discarding of a cigar stub caused a \$5,000 fire loss at the plant of the Philip E. Drought Hay and Grain Co. of Kansas City, Mo., on April 15. The place was well insured.

A grain warehouse, containing 900 bushels of grain, belonging to M. J. Enright of McCook County, S. D., was burned May 3. It is thought children playing with matches were responsible.

Eight thousand bushels of corn and some other grain was burned in a fire which on April 20 destroyed Borgett & Sons' elevator at Mounds, I. T. The loss will far exceed the insurance of \$7,500.

Fire destroyed an elevator on the Brookmont Farm, near Sac City, Iowa, the morning of April 13. About 12,000 bushels of corn were lost. It is supposed the fire was caused by the corn heating.

On April 20, the 30-horsepower gasoline engine at the Garn Elevator in Plymouth, Ind., exploded. The engine was totally demolished and the engine room badly wrecked, while Frank Garn and Charles Long were severely injured.

A disastrous fire consumed the grain elevator owned by the Capital Grain Co. at Camp Russell, eight miles from Guthrie, Okla., on April 22. A. E. Stinson, president of the company, reports the loss at \$25,000, with but \$1,000 of insurance.

A hot-box in the machinery caused a fire which destroyed the Peavey Elevator at Clyde, N. D., on May 1, together with 10,000 bushels of wheat. Frank Warren, manager of the house, is quoted as saying the loss is \$12,000, partially insured.

C. F. Baggett & Co.'s elevator at Glencoe, Okla., burned May 4, with 2,500 bushels of grain. The fire, it is believed, was caused by spontaneous combustion of wheat. The loss was \$7,000. It is planned to rebuild the elevator immediately.

McCabe Bros. Elevator at Hampden, N. D., was burned to the ground on April 27, together with 20,000 bushels of wheat. A car on the siding filled with wheat was also destroyed. The loss will be about \$15,000. The origin of the fire is unknown.

Fire destroyed the Northwestern Grain Co.'s Elevator at Schaller, Iowa, early the morning of April 30, and the building with 10,000 bushels of grain was entirely consumed. There was a high wind at the time and several adjoining buildings were endangered.

Spellman & Spitley, grain dealers at Chester, Ill., lost a crib with 10,000 bushels of corn in a fire which occurred April 28. A volunteer bucket brigade kept the flames from the elevator. The fire is supposed to have been due to a spark from a locomotive. It is estimated the loss is \$4,600, with no insurance.

On May 5, a hot-box in the scouring machine started a fire which destroyed the grain elevator and flour mill owned by ex-Lieutenant-Governor John Strong at South Rockwood, Mich. In the elevator some 10,000 bushels of wheat, 3,000 bushels of oats and 700 bushels of corn were stored. The total loss will approximate \$35,000, with \$10,000 insurance.

William Clark, night watchman at the Globe Elevator of Duluth, Minn., was killed the night of May 3, just after reporting for work, by having his head caught between the bottom of the passenger elevator cage and an iron bar in the doorway. There were no eye witnesses to the accident, the body of the watchman being found by fellow employees who had started through the building in search of the passenger elevator.

With the exception of an iron bar, there is no other means to prevent persons from stepping into the elevator shaft. While Clark was leaning over the bar the elevator dropped from one of the floors above, causing his death. Clark was but twenty years of age and had been employed at the elevator for some time.

Originating in the cupola of the elevator at Omemee, N. D., owned by the Heising Co., fire completely devastated that plant and seriously damaged the elevator of the St. Anthony and Dakota Co. About 15,000 bushels of grain in the Heising plant was burned. The loss will reach \$25,000, but was fully covered. No cause for the fire has been assigned.

J. P. Haven, manager of the Minnekota Elevator at Lemert, N. D., accidentally dropped a lantern while climbing a ladder, on May 1, and in a moment the whole interior of the elevator was a mass of flames. Mr. Haven had to hustle to get out, and when he did he could only watch the building and 11,000 bushels of grain go up in smoke. The building will be rebuilt at once.

A report from Osnabrock, N. D., states the National Elevator Co.'s plant was consumed by fire on April 25, together with 29,000 bushels of grain. Some of this was saved. It is thought a hot-box was responsible for the blaze. The loss is estimated at \$25,000. Six other elevators in close proximity to the burning structure stood in danger of being burned, but the fire department succeeded in preventing them from catching.

Early on the morning of April 24, fire destroyed the elevator owned by Harry Epps at Metcalf, Ill., together with 86,000 bushels of corn. The loss on the building represented \$13,000, while that of the corn was estimated at \$35,700. The latter was well insured, while the elevator was only partially covered. While some persons maintain the fire was due to an incendiary, others hold a spark from a passing locomotive was the cause. William Marquand, the manager of the plant, was elected to the presidency of the village but a few days before the fire, having headed the anti-license ticket in a hard fight. It is suggested one of his political enemies could have fired the building.

Two grain elevators at Bellingham, Minn., were burned down on the night of April 23, and it is thought an incendiary fired the buildings. The Interstate Elevator, which burned under similar circumstances a year ago, was the first to go, together with 9,000 bushels of grain. A few hours later the Anchor Elevator with 5,000 bushels of grain was found on fire, having caught from the inside. The loss will approximate \$25,000. The police are investigating the situation. Harry Spanton and Melville Campbell were arrested at Madison, Minn., on April 30, charged with arson in the third degree, upon the complaint of a detective in the employ of the Great Northern Railway Co. They are charged with setting fire to these elevators and with setting fire to the Interstate Elevator at the same place a year ago. Melville Campbell has confessed that he set fire to the elevator burned a year ago, at the instigation, he alleges, of one Spanton, who was in charge of the elevator.

[Circular of the Millers' National Insurance Co.]
SUGGESTIONS TO HOLDERS OF FIRE INSURANCE POLICIES.

BY M. A. REYNOLDS, SECRETARY.

Nothing herein contained is meant to be in any way a reflection on the policyholder. Thirty years of experience has demonstrated that, considering the money involved, there is nothing in the whole range of mercantile obligations so little understood by the average business man as his insurance contracts. Policies of insurance for thousands of dollars, in every way as important as deeds and mortgages, are accepted and filed away without being opened, much less read; and the only wonder is there are not more complications, disagreements and lawsuits than actually occur.

It should be borne in mind that every policy designated as "Standard" is an act of the legislature of the state bearing its name, and the company issuing it is prohibited from giving you any other contract under penalty of heavy fine for each policy issued. It being a statute of the state and not a creation of the company, its provisions are alike binding on the insured and the insurer; and you should know what your obligations are and see that they are performed both before and after a loss.

The payment of a nominal premium and assessments, for which under certain conditions you may call upon the company for hundreds of dollars, the property insured being at all times under your care and protection and never the company's, implies in itself that where odds are so great you

incur responsibilities which a careful reading of the policy will disclose.

See to it that all policies on a given risk are "concurrent." This does not mean that all policies need be the same amount, but that the description of all property insured is the same in each policy, and is covered under the same items or divisions of the policy-form, and that all endorsements of any character, or any changes that may be subsequently made, are attached to all policies alike.

Know what your property is worth as a purely physical proposition, apart from land values and good-will of the business, and apportion your insurance on each item accordingly, for in no case can you collect more than the actual cash value of the property destroyed is proven to be at the time of the loss, irrespective of its original cost. Keep a record of your business, so that in case of total loss on stock, you can conclusively arrive at quantities and readily establish the amount of your claim.

Take careful note of the provisions of the policy which make it void or voidable by your own action, so that it does not prove worthless when it should be of greatest value to you.

Notify every company interested at once. If there is a total destruction of the property, say so. If only a partial loss, state the fact, and give your best estimate of the amount of the damage. Adjusters have been sent on losses where the expenses of the trip were in excess of the claim, owing to a lack of this knowledge. If the loss is small, you may get immediate instructions to go ahead and repair, saving time and loss of business which the delay in sending an adjuster might incur.

Losses are taken up in the order they are reported, and it may be days before your claim can be reached. Without delay proceed to properly care for any property left in a damaged condition and protect it from further loss. Pay no attention to advice from any source that conflicts with this instruction, for it is a provision of your policy, the ignoring of which will make you responsible for any loss than follows. Damaged grain in any condition has a greater or less market value, and this is true of flour, feed and other mill products; and the salvage should be put in the best possible condition for sale, or to be valued by appraisers. If it is in such condition as to become worthless in a short time, sell for the account of "whom it may concern" at the best obtainable price, keeping account of the sales and expenses to present to the adjuster. If the insurance is in excess of your loss, the expenses are a charge against the company. If less than the loss, every dollar saved belongs to you.

Save the property in any event, the rule of law being that you are required to do "what a prudent man would do having no insurance;" and it is held that "no prudent man will permit the destruction of property in his power to save."

Having attended to the salvage, make a detailed statement of your loss, for each item of your insurance. Your contention that "the loss is greater than the insurance" may be true, but it will not be accepted as a voucher by state insurance departments and chartered accountants who examine the company, without the items that go to make the claim. An invoice is required when you sell a bill of goods to a customer, and the company is compelled to require one of you, and you must be sworn as to its truth; therefore, prepare it with care, for a knowingly untrue statement in proofs of loss is one of your acts that voids the policy.

Do not get the mistaken impression that this or any other reputable insurance company sends an adjuster to cut a claim below your actual loss, and that you must make a fictitious claim in order to get what is justly your due. This unfortunate mistake has put more claimants under suspicion of having burned their property for the insurance, caused more disagreements and so-called "hold-ups" than any other one thing. An honest claim, carefully made up and presented in good faith, will be met by this company in the most liberal spirit possible, consistent with a proper regard for the rights of its policyholders, who must be assessed for the loss, whose interests should be as faithfully conserved as those of the claimant. A sound public policy and the rights of those who pay, alike demand that a dishonest loss or a fraudulent claim be fought to the highest courts before voluntary payment is made, and this line of action will be rigidly maintained if such cases occur. Neither this, or no other company, ever writes a policy which, at the time of its issue, is expected to become a claim.

The fact that you have one or more policies of ours is proof that we think you a desirable risk, and let us hope you will never have a claim to present, but if you do, the observance of these suggestions will make it easy to settle.

TRANSPORTATION

Early in May rates were $1\frac{1}{4}$ cents on corn from Chicago to Detroit.

The Wisconsin State Railroad Commission listened to complaints of Manitowoc grain dealers against the Chicago & North-Western and the Wisconsin Central Railroads on May 7.

May 1 saw 107 big lake carriers in the Duluth harbor. The congestion was due to the late opening of the Sault River. The carrying capacity of the fleet was estimated at 750,000 gross tons.

On May 1 the Missouri Pacific Railroad made a reduction averaging two cents per hundred on grain in carload lots from Kansas territory to all points south and east. This includes wheat for both export and domestic trade.

As a result of the enactment of the maximum freight rate law by the last Kansas legislature, several of the railroads announced a new grain rate tariff in effect on May 2. It reduces the former rates on grain and grain products 15 per cent.

An advance of a cent a hundred on grain by the roads in the central and southeastern territory was discussed at a meeting of officials in Chicago on May 1. The advance is to be made on grain moving from central territory into the Mississippi Valley.

It is declared the Victoria Elevator Co. and a number of local residents of Buford, N. D., will place a first-class new power boat at the mouth of the Yellowstone River. It will be driven by a 40-horsepower engine and will be able to land on either side of the river, transporting grain, etc.

According to the Chicago Record-Herald, it is estimated that, if the manufacturers are equal to the test, between 340,000 and 350,000 freight cars will be added to the total equipment of the railways of the United States, fully 5,000 passenger cars will be built and more than 6,000 locomotives will be added to the steam power which is now available.

During the first week of May the Cleveland vessel owners and others who expect to share in moving the 25,000,000 bushels of grain in store at Duluth were in controversy with the grain shippers over rates to Buffalo. They held for $2\frac{1}{2}$ cents per hundred, while the shippers would offer no more than 2 cents. Some charters were made at this rate.

The Great Northern has again demanded the enforcement of its orders issued in March at Minneapolis, but subsequently withdrawn, which notified all elevators located on its tracks that cars of any kind could not be loaded for the local mills. This works great hardship upon every elevator on the Great Northern tracks, and virtually puts them out of business.

President Livingston of the Lake Carriers' Association said on May 5: "I think the outlook was never better than it is at the opening of the season of 1907. With new ships coming from the yards as fast as they can be turned out and freight abundant for all of them, I foresee for the great lakes as an artery of traffic between the east and west the most successful year in their history."

At Buffalo the same situation as existed all winter is reported as late as the last week of April, in regard to the trouble in securing cars for New England distributors. With the opening of the Erie Canal on April 25, but little relief was found, as the boats there are small and comparatively few. This is because no new ones have been built pending the building of a new canal. Owners of lake vessels assert the only salvation of the lake-carrying trade is in the larger Erie Canal, the railroads having demonstrated their indisposition or inability to handle the business presented.

At a meeting of the American Railway Association in Chicago on April 25, it was decided to raise the fee charged against the road thus retaining the car from 25 to 50 cents a day, and a letter ballot election will be held to determine whether a penalty of \$5 a trip is to be assessed against the road using for its own business the cars of another. The Association also decided to maintain the car clearing house established in Chicago last January upon suggestions made by the Interstate Commerce Commission; and to do away with the "graveyard" in New England by cutting down the free time granted for unloading cars to 48 hours. It was estimated by members of the Association that the railroads are

nearly 150,000 cars short of demands made by the actual traffic offered for transportation.

Beginning May 12 the commodity tariff No. 2-B, to apply on grain and grain products in Texas, will be amended by having the addition of "milling in transit," rule No. 10, section 6.

THE VALUE OF NAVIGABLE WATERWAYS.

The proposed work of the President's Inland Waterways Commission as mapped out is satisfying to the eye, and the victory of this peaceful campaign again against freight congestion and freight rate raising will be a material victory for the United States, says the Courier-Journal.

James J. Hill, a man who has done things, and who can see the results of great undertakings beyond the heap of gold that represents the probable expense of accomplishing them, says there will be no freight congestion when the Government develops its system of waterways and that there would not be a freight problem now if the Government had not neglected to improve the waterways. A fifteen-foot channel from St. Louis to New Orleans, as Mr. Hill sees it, would cost perhaps \$100,000,000; but if it should be completed a single powerful tugboat could pull thirty trainloads of freight upon it, and heavy freight requiring only moderate speed would go to the seaboard by way of the Gulf. There would be no longer any freight congestion between the East and the West.

We are accustomed to think of the Mississippi, the Ohio, the Hudson, the Missouri and a few other large rivers, as our "system of waterways," forgetting that there are in the United States countless lesser streams and countless canals and places where canals should be, all of which are important in connection with the great and rapidly growing transportation problems of this land of marvelous progress.

But the developments of our waterways is still embryonic. Even upon our larger rivers—the Ohio, for instance—transportation of heavy freight is often impossible during the dry months of summer, as the extremes of low water and high water are being increased, while the destruction of the timber upon the watersheds is allowed to continue and the work of improving the streams is allowed to drag along as it has dragged for the last fifty years.

Congress has been niggardly and procrastinating in the matter of improving the rivers and building canals, but Congress is not wholly, nor perhaps greatly, to blame. The people are just now beginning to get away from the idea that the rivers and harbors bill is altogether a "pork barrel" measure, and from the erroneous notion that the development of railroad transportation has rendered obsolete the slower but surer and cheaper water transportation. The President grasps the importance of the interior waterways as a preventive of freight congestion and as a check upon extortion. The public will grasp it and Congress will deliberate and appropriate in accordance with an educated public sentiment.

The work of improving the waterways is gigantic, but the results will be in happy proportion to the labor and expense, and the growth of the country and the expansion of her industries and her commerce demand that the programme be carried out.

RECIPROCAL DEMURRAGE IN MISSISSIPPI.

A decision handed down on April 22 by the Supreme Court of Mississippi will have an interest to all those states which have enacted reciprocal demurrage laws.

The case at bar was brought by the Keystone Lumber Yards against the Yazoo & Mississippi Valley Railroad to compel that company to pay one dollar a day, or fraction thereof, for every freight car held for more than twenty-four hours at any point on its lines. These demurrage charges, it was pointed out, were originated by the railways themselves, and receivers of shipments were compelled by the companies to pay a penalty for consuming an unreasonable time in unloading the cars.

The Mississippi court says that the same law must apply to the carriers, and hereafter in that state railways will have to keep their freight cars moving. The decision includes the following paragraph:

"The law of reciprocal demurrage is founded in the soundest common sense and the highest spirit of equity. If such laws are rigorously enforced we will hear no longer of the freight congestion that has been so prevalent throughout the past winter; of thousands of empty cars standing un-

used in railroad yards in one section of the country, and of coal famine in the other for the want of cars."

[From the "Railway and Engineering Review."]

RECIPROCAL DEMURRAGE FROM A RAILWAY POINT OF VIEW.

BY E. D. SEWALL.*

Agitation in favor of the enactment of state and national laws embodying that which is misnamed "Reciprocal Demurrage" is based to a very large extent upon a misunderstanding of present conditions and the results which would follow such legislation.

It is important that railway employes coming in contact with the shipping public should be posted upon the underlying principles of the subject in order that they may be able to present to the advocates of such legislation the unfairness as well as the consequences thereof.

Three of these principles are:

(a) Freight locomotives and cars represent about one-fifth of the total capital invested in a railroad, and are practically the only portion of the property which produces revenue; the value of the remaining four-fifths depending upon the use made of this one-fifth.

(b) Locomotives and cars can only be of value to their owners when moving under load or toward loading point.

(c) Cars are at times very valuable to consignees for storage purposes on the basis of the present low demurrage rates.

If the year's business were equally distributed, it could be well handled with the present equipment, but the demand for cars varies greatly with the season and general business conditions.

The average freight equipment of the C. M. & St. P. Company during the past year was 42,658 cars, of which about 3 per cent were always on repair tracks, leaving available for loading 41,378 cars of all kinds.

The average daily loading for the year (the best the company has ever achieved) was 10.4 per cent of cars in service. The daily loading varied to the extent of 1,634 cars. This variation in loading represents equipment to the amount of 13,572 cars, or an investment of \$10,800,000, based on the average value of all cars now in freight service.

In other words, there is idle during the dull season 30 per cent of the entire equipment, and these figures are based on a year of extraordinary demand for cars. The number of idle cars decreases as the prosperity of the territory served increases. When not in service, equipment is an actual expense, causing switching in addition to the cost of maintenance.

In the busiest season calls are frequently 20 per cent in excess of cars available. On this basis it would require to fill all orders promptly an addition of 20 per cent to the equipment, or 8,532 cars, the cost of which, together with a corresponding increase in the motive power, would be about \$8,300,000. The interest on this additional capital at 5 per cent, plus the cost of maintenance, would amount to \$1,395,000 annually.

A determined effort is made to equitably distribute the available equipment, and to this end empty cars are frequently hauled long distances, although in many cases they could be loaded with but little delay on the division from which they are taken. Such empty car hauls are not exceptional, as will be understood from the statistics in the last annual report, showing that of the total car mileage of the system for the year ending June 30, 1906, 28½ per cent was empty car movement, the result of the efforts to fill calls promptly. In other words, a large percentage of the entire operating expenses of the system is incurred to this end—the ostensible object sought by reciprocal demurrage legislation.

The detention of cars for loading and unloading exceeds the time consumed in transit.

The limitation of every railroad system in times of heavy traffic is the terminal situation, and the proper terminal situation depends upon the exertions of every shipper and consignee to unload with the least possible delay.

The number of cars on this company's tracks daily for loading or unloading at the five principal terminals alone, during the busy season, averages about 30 per cent of the total equipment, or more than 2½ times the number of cars loaded on the entire system. These cars are so held from two to twenty days.

If this company had the 20 per cent additional equipment before referred to as necessary to fill all calls promptly in the busiest season, it would avail but little unless every consignee added a

*Read by the author, who is assistant to president, C. M. & St. P. Ry., before the Iowa Railway Club.

corresponding amount to his unloading facilities. Based upon past experiences this would not be done, and the additional cars when loaded would be a further menace to the terminals already overburdened. In this connection, attention is called to the fact that increased storage facilities do not necessarily, or as a rule, increase the unloading facilities. On the other hand, if consignees were prepared to promptly handle all freight as it arrives, the present car supply would be sufficient to avoid any reasonable complaint on the part of shippers.

The present is an era of great speculation, but no known form of speculation offers the certain profits which the proposed legislation would pour into the coffers of that class of shippers who have facilities for loading from 20 to 100 or more cars a day. Other forms of speculation require some investment, but this requires only such superficial knowledge of the car situation as every shipper has in times of shortage, and the placing of an order with every road available for the maximum number of cars the shipper can load, with the absolute assurance that filling over 10 per cent of the orders is a physical impossibility, and the penalties for failure to fill the other 90 per cent will be the handsome "rake-off." What limit is there to the operations of a line elevator company with from 20 to 50 houses, each with a loading capacity of ten or more cars per day—of a milling company shipping 50 to 150 cars per day—of a coal company from whose docks 100 cars per day can be forwarded—or of any other large shipper? Note that the small shipper can get no benefit whatever from this scheme, but the working out of it would doubtless deprive him of his fair quota of the cars available. The possibility of using a reciprocal demurrage law for the payment of rebates, to the absolute nullification of other statutes, is self-evident.

The free interchange of cars with other lines has brought distant markets to manufacturers and other shippers on this line. Penalties for failure to furnish cars will force each carrier to keep its own equipment on its own rails, and require the transfer of freight at junctions with connecting lines.

RECONSIGNMENT CHARGE AT ST. LOUIS.

The U. S. Circuit Court of Appeals on April 19 handed down a decision in the case of the St. Louis Hay & Grain Co. vs. the Southern Railway Co. which affirmed a decision of the U. S. Circuit Court at St. Louis, requiring a compliance with the order of the Commerce Commission abolishing the reconsignment charge at East St. Louis.

The grain company attacked the legality of the charge of 2 cents per 100 pounds exacted by the railway company for the privilege of reconsigning hay at East St. Louis. It was shown that no similar charge was exacted by the Southern Railway Company or other carriers when hay was reconsigned at points on the Ohio River; that previous to June 1, 1903, no such charge was exacted at East St. Louis; and that dealers at all the points were in sharp competition with each other in the markets of both purchase and sale. The hay originated at points north of East St. Louis and was shipped to markets in the Southeast. The Commerce Commission held that, under all the circumstances, the charge was unlawful to the extent of 1 cent per 100 pounds; and awarded reparation to the Grain Company in the sum of \$1,572.08 for the excess paid by it between June 1, 1903, and February 1, 1905.

Send us the grain news from your neighborhood.

The report of the New Orleans Board of Trade shows eleven ships having cleared in April with 185,150 bushels of wheat and 424,388 bushels of corn. This is a decrease of 91,449 bushels of wheat and 564,812 bushels of corn over April of last year. However, 2,889,420 bushels more of wheat was shipped between September 1, 1906, and May 1, 1907, than during the same period last year. The decrease in the exportation of corn during the same period was 11,155,001 bushels.

It is announced from Cleveland, Ohio, that former Judge Wing has organized a company with \$4,000,000 capital to control the bean trade of the country. The company is called the Interstate Products Company, and is declared to be a trust "immune from attack." It is further said that "the company has taken options upon nearly every elevator in southern Michigan and western New York, where virtually the whole bean crop of the United States is grown. There are 300 of these structures, and necessarily the supply will have to pass through them. As the company will actually own the elevators, it will not be in conflict with the anti-trust law."

PERSONAL

W. W. Gallup has resigned as agent for the Omaha Elevator at Alda, Neb.

F. M. Beaty has resigned as grain buyer for the Miller Elevator at Clinton, Minn.

James R. Meyer has left the Osborne-McMillan Elevator at Max, N. D., to go to Lankin.

George E. Trefethen, a resident of Maine, is the new buyer at the elevator in Osseo, Minn.

Halvor Elljison of Gary, S. D., is the new agent in charge of the Thorpe Elevator at Leeds, N. D.

Emil Erickson of Lakefield, Minn., has gone to Kimbrae to take charge of the McGlin Elevator.

C. A. Newhouse of Mazeppa, Minn., is now buyer for the Percy Elevator Co. at Grand Forks, N. D.

F. E. Baldwin of Chokio, Minn., is the new representative at the Baldwin Elevator in Fairmount, N. D.

H. C. Rustad has succeeded J. B. Jacobson in charge of the Mooers & Co. Elevator at Kirkhoven, Minn.

George F. Piper has resigned as vice-president of the Chamber of Commerce at Minneapolis, Minn.

L. C. Larson of Ortonville, Minn., has been placed in charge of the Miller Elevator at Clinton, Minn.

T. H. McDermott of Luverne, Minn., has been made buyer and auditor for the Coffey line of elevators.

J. H. Warren of Forest River, N. D., has gone to Agate, N. D., to take charge of the Northland Elevator.

Earl Schoen, manager of the Victoria Elevator at Hector, Minn., will be transferred to Beaufort, N. D.

P. L. Berger has severed his connection as agent for the Pacific Elevator at Green Isle, Minn., which has closed.

Otto Voigt of Lebanon, S. D., has gone to Mansfield to take charge of an elevator for the Atlas Elevator Co.

A. J. Schmitz of Rock Lake, N. D., will replace F. W. Berg as agent at the St. Anthony Elevator of Knox, N. D.

James Ruddy, formerly in charge of the Western Elevator at Seaford, Minn., is buying grain at Verdi, Minn.

F. L. Griffiths of Hope, N. D., has succeeded Mr. Berard as agent for the Monarch Elevator Co. at Pembina, N. D.

Edward Loucks has resigned as buyer for the Little Falls (Minn.) Milling Co. and is succeeded by Joseph Miller.

F. H. Wilbur of Phillips Woods, Me., has been appointed treasurer for the Northwestern Elevator Co. and assumes office in June.

Harry Humphrey has been made manager of Coon Bros., who recently acquired the Simeon Crumbaugh Elevator at Leroy, Ill.

Edwin Kruger of Mercer, N. D., has been transferred as agent of the elevator there to similar duties at a new plant in Dover, N. D.

Louis Rice, who has been in charge of the construction of the Plymouth Elevator at St. Peter, Minn., has gone to Doon, Iowa.

Henry W. Chandler, treasurer of the Whitman Grain Co. at Brockton, Mass., has been elected on the board of the Whitman Savings Bank.

H. F. Daun recently resigned his position as manager of the Cargill Elevator Co.'s plant at Forbes, N. D., and has moved to Minnesota.

F. Tanner recently received painful injuries about his head by being struck with heavy cables while at work in the Farmers' Elevator at Cooksville, Ill.

Harry Haines, for many years in the grain business at Kansas City, Mo., is the newly elected secretary of the Galveston (Texas) Chamber of Commerce.

Rolly Ratliffe of Leroy, Ill., has resumed charge of the Bartlett, Frazier & Carrington Elevator after a three months' leave of absence on account of bad health.

A. B. Loomer, buyer for the Huntington Elevator Co. at Carpenter, Iowa, was recently operated upon for a spinal difficulty, and is convalescing rapidly.

Samuel Johnson, local representative for the Great Western Elevator Co. at Revillo, S. D., was married to Miss Charlotte Jackson of Le Roy, Minn., on April 17.

R. A. Hunt, for the past year in charge of the Plymouth Elevator at Lake Wilson, Minn., has finished his season's work and is now resting at his home in Hartford, S. D.

R. F. Stewart, formerly in charge of the Andrews & Gage Elevator at Prayton, N. D., has been transferred to Towner. The elevator he leaves will be closed for the summer.

Charles Whitehead, manager of the Cargill Elevator at Mantador, N. D., is spending a vacation in Chicago, but will be with the Cargill construction gang during the summer.

Edward Hamilton of Hamilton, N. D., succeeds F. D. Murphy in charge of McCabe Bros.' Elevator. Mr. Hamilton was formerly in charge of an elevator for the same firm at Cavalier.

E. S. Sweet of Grangeville, W. L. Goodnight of Genesee and C. E. Wood of Genesee have recently been appointed by the governor as grain commissioners for the state of Idaho.

Governor Burke of Bismarck, N. D., has appointed S. A. Nye, Valley City; Frank Maurer, Devil's Lake, and A. R. Thompson, Rolla, as members of the State Grain Commission.

BREWERS' GRAINS—DRIED.

The enormous quantity of brewers' grains, over half a million tons yearly, calculated as ordinary dry grains, makes the question of the value of this product as a feed for the milch cow a highly important one.

That it is a most nutritious material is undeniable. Numerous analyses have shown that in the ordinary state of dryness they contain of fat over 6 per cent, of albuminoids over 20 per cent, and of carbohydrates (starch, sugar, etc.) 40 to 50 per cent.

Had the brewers' grains been used exclusively in the dry state there would probably never have been any objections raised against them as a feed for milch cows. The wet grains, however, containing, as they do when they leave the mash tub, about 75 per cent of water, are liable to undergo changes, especially in warm weather, changes produced by fermentation and putrefaction [which render them highly objectionable].

There is, of course, no necessity of allowing the wet grains to become rotten. Even if the grains in such state are not injurious to the cattle, their food value is lessened. The putrefaction bacteria reduce the carbohydrates and albuminoids partly into carbonic acid and ammonia and thus destroy them.

If the wet grains are dried without delay they contain very little lactic acid. The question may therefore be raised whether the drying process lessens the value of the grains. A comparative test of the feeding value of the moist and dried grains was carried out at the New Jersey Agricultural Experiment Station and published in their Fifth Annual Report. It was found that a change from dried grains to moist was followed by an increase from 21.4 pounds per cow to 22.5 pounds daily. The conclusion is, therefore, that the digestibility of the food is slightly diminished by the drying process. The advantage of the dried grains is that they will keep for any length of time without becoming deteriorated. One pound of dried grains contains as much food as three or four pounds of wet, according to the amount of moisture in the wet grains.—Dr. R. Wahl, Chicago.

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

S. E. Cook, Lockport, Ill.

J. P. Larson, Cortland, Ill.

Victor Zahm, Vienna, Wis.

James McGrew, Kankakee, Ill.

H. T. Smith, Southampton, Pa.

Capt. W. H. Wallace, Henry, Ill.

E. F. Shepard, of Shepard & Bartlett, Chagrin Falls, Ohio.

H. J. Tepper, representing Richardson Scale Co., New York City.

S. W. Strong, secretary Illinois Grain Dealers' Association, Pontiac, Ill.

C. F. Beakbane, president Avery Scale Co., North Milwaukee, Wis.

C. J. Simeon, secretary and treasurer Avery Scale Co., North Milwaukee, Wis.

W. L. Richeson, New Orleans, chief grain inspector for the New Orleans Board of Trade.

OBITUARY

M. C. Ott, of Wilton Junction, Iowa, died at his home on April 13. Mr. Ott was in the grain business.

P. A. Swartz, senior member of P. A. Swartz & Co., grain dealers at Philadelphia, Pa., is dead at his home.

S. W. Weeks, a grain dealer of Rochelle, Ill., died at his home on April 13. A sister is his only survivor.

F. R. Bunker, at one time in the elevator and grain business with E. Locke at Willmar, Minn., died April 22 at his home in Atlanta, Ga.

Word has been received of the death of George N. Stiles, a member of the Milwaukee Chamber of Commerce, who died recently at a sanitarium in Kenosha, Wis.

Orin S. Hopkins, a grain dealer in Minneapolis, Minn., for many years, and a member of the Chamber of Commerce, died the latter part of April from a complication of diseases.

Jeptha Runyon, of East Orange, N. J., died suddenly on April 30, at the age of 80 years. Deceased was a retired grain dealer of East Orange, where he resided for the past twenty-five years. A twin brother, one son and two daughters cherish his memory.

Michael Culp, a former member of the Philadelphia Commercial Exchange, committed suicide by hanging in his hay shed at Telford, Pa., on April 18. It is said he was despondent because of losses in the grain market. Deceased was 63 years of age and leaves a wife and family.

Benjamin Warren, Jr., one of the oldest members of the Peoria Board of Trade and head of the grain firm of Warren & Co., died on May 5, at his home in Peoria. Death was due to Bright's disease and diabetes. Mr. Warren also held a membership on the Chicago Board of Trade.

David Landreth, a partner in the grain firm of L. Landreth & Co., passed away at his home in Los Angeles, Cal., on April 25, after a four weeks' illness from erysipelas and heart trouble. He has been successful in business since arriving from the East some sixteen years since and was highly respected as a citizen.

A. J. Ludlam, a one-time grain dealer of Atlanta, Ill., died at his home near that place on April 20, after a long illness. Deceased was born July 6, 1825, at Dennis Creek, Cape May County, New Jersey. He has led a varied career and for many years was in the office of the Secretary of State at Springfield. A wife and five children mourn his demise.

Gideon Chenoweth, a veteran of the civil war, died on April 7 at the home of his son in De Land, Ill. For nine years he was in charge of an elevator at Monticello, Ill., which position he left to go to Kansas. Upon returning he took employment with Knight & Co. in the grain business. Later he became a rural mail carrier. Mr. Chenoweth was born in Stark County, Ohio, March 16, 1840. But three sons survive.

Albert R. Brewster, a widely known citizen of Lawrence, Mass., where he was for many years active in the grain business, passed away on April 16. He was born on September 10, 1826, at Cambridge Center, Vt., and has resided at Lawrence since 1845. Mr. Brewster's career was conspicuous because of his activity in politics and public life. The widow, a son and two daughters are his mourners. The funeral was held under the Masonic auspices and was largely attended.

The many friends of Elias Fursman, an old settler of Woodford County, Illinois, and an authority on corn, were grieved to learn of his demise late last month, at his residence in Chicago. He designed the big corn picture which formed a feature of the Illinois exhibit at the World's Fair, and a similar picture for the state of Iowa, which was exhibited at the St. Louis Exposition. At the time of his death Mr. Fursman was arranging a corn display to be held in Chicago next fall. He leaves a widow and three children.

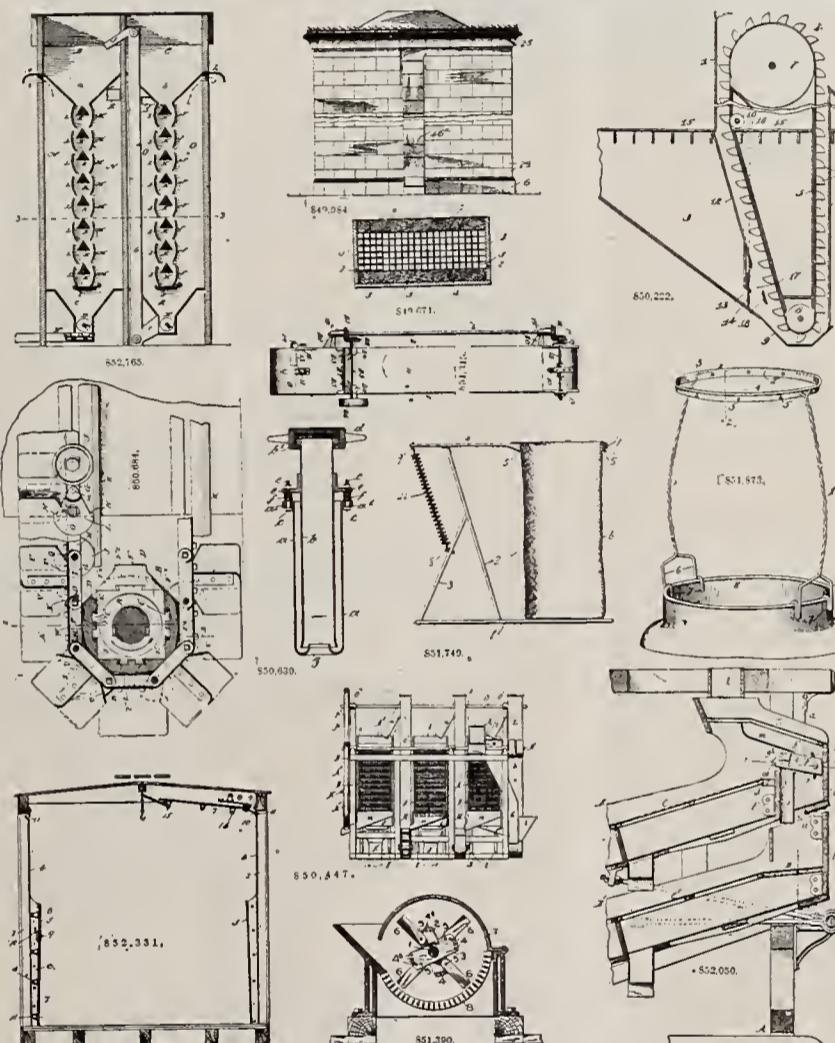
Word of the death of Moses H. Rolfe, a prominent grain dealer of Newburyport, Mass., was received with surprise by his many friends in the trade. Mr. Rolfe was in his 60th year when he passed away on April 18. He was a native of Newburyport and has been identified with the grain business practically all his life. When a youth Mr. Rolfe entered the employ of the late Paul Titcomb, and was his right-hand man for years. On Mr. Titcomb's death the decedent succeeded to the grain business and numbered his

customers all over the county. The widow and four children mourn his death.

R. C. Gunter of Bridgeport, Ala., where he was prominently identified with the grain business, is dead at his home. Deceased was formerly a banker and was reputed as a man of considerable wealth. A wife and two brothers mourn his demise.

George Egolf, a prominent grain dealer of Philadelphia, Pa., passed away on April 21 at his home. During the Civil War Mr. Egolf was a wagon master. In 1872 Mr. Egolf and Jacob Lutz formed a partnership under the firm name of Egolf & Lutz, as dealers in grain and feed at Broad and Cumberland streets. The firm was dissolved in 1885. In 1896 Mr. Egolf erected the large building at Broad and Huntingdon streets, in which, in partnership with his son Harry and his son-in-law, August Fertig, he carried on a grain, feed and coal business under the firm name of George Egolf & Co. Mr. Egolf served several years as a Port Warden and was a member of the Commercial Exchange and a founder and vice-president of the Excelsior Trust Co. He stood high in Masonic circles. He is survived by a widow, who was Emily Kellerman, a son and four daughters.

In the death of Samuel Thornton Kemeys Prime



the grain trade loses one of its old-time friends. Mr. Prime, who will be remembered as a former contributor to these columns, was for more than a quarter of a century stationed at Dwight, Ill., but latterly at Chicago. His death came as a result of paralysis on April 26 at the Chicago Home for the Incurables, where he had been a patient sufferer for the past two years. Mr. Prime was born in Weston, Conn., July 31, 1834, and was the son of Irenaeus Prime, author, minister and for many years editor of the New York Observer. About ten years ago he moved to Chicago from Dwight and made his home at the Union League Club. "Prime's Crop Reports" were looked upon by farmers and others as reliable and made their publisher known throughout the country. Even after the government broadened out its field on this work Mr. Prime was considered an authority where views of experts conflicted.

The new Indiana pure feed law requires that a tag shall be attached to each 100-pound bag of mill feed sent out by the mills, giving its exact food properties, and the same is subject to examination by a chemist in compliance with the pure food laws. These examinations have to be made at various intervals and the records of all weights and the amount of the tax (1 cent per hundredweight) must be sent to the chemical station of Purdue University. Fifty dollars for the first offense and \$100 for the second offense is the penalty attached to the violation of the statute.

LATE PATENTS

Issued on April 9, 1907.

Device for Testing the Germinating Power of Seed Corn.—Alfred R. Francis, Kent, Iowa. Filed October 2, 1905. No. 849,671. See cut.

Grain Bin.—Thomas Dougherty, Minneapolis, Minn. Filed June 27, 1905. No. 849,984. See cut.

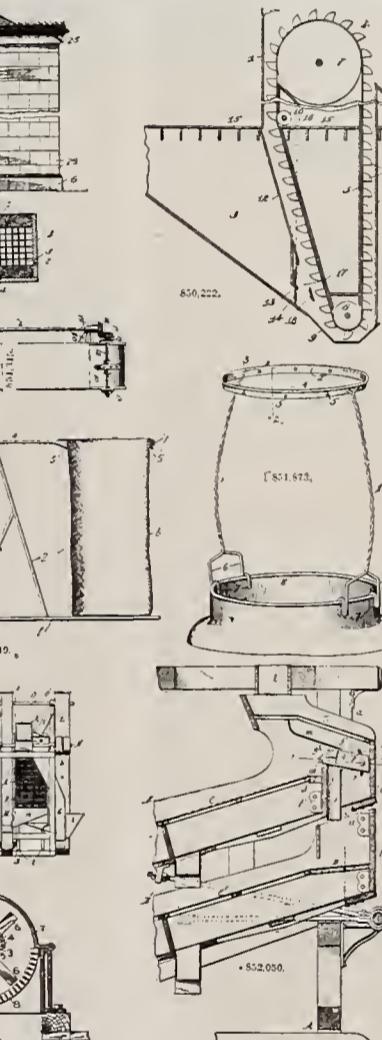
Conveyor Belt.—Ernest A. Houchin and Anthony Huber, Brooklyn, N. Y. Filed April 27, 1906. No. 850,002.

Issued on April 16, 1907.

Grain Elevator.—Thomas F. Hall, Omaha, Neb. Filed March 12, 1906. No. 850,222. See cut.

Separating and Grading Machine.—Charles F. Shumaker, Silver Creek, N. Y., assignor to Invincible Grain Cleaner Co., Silver Creek, N. Y. Filed November 1, 1905. No. 850,447. See cut.

Pneumatic Device for Drawing Out Grain and Similar Goods.—Paul Gebhardt and Carl Gebhardt, Stralan, near Berlin, Germany. Filed September



24, 1906. No. 850,639. See cut.

Endless Conveyor.—Francis A. M. Smulders, Rotterdam, Netherlands. Filed February 5, 1907, No. 850,684. See cut.

Issued on April 23, 1907.

Beltless and Chainless Drive Grain Elevator.—William Polis, McVille, N. D. Filed January 10, 1907. No. 851,315. See cut.

Crusher.—Milton F. Williams, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Co., St. Louis, Mo. Filed May 15, 1905. No. 851,390. See cut.

Issued on April 30, 1907.

Bag Holder.—Henry F. Henke, Waconia, Minn. Filed June 14, 1906. No. 851,749. See cut.

Bag Holder.—Mariette E. Eagleton, Three Rivers, Mich. Filed February 11, 1907. No. 851,873. See cut.

Distributor for Grain Separators.—Malcolm L. Barbeau, Silver Creek, N. Y., assignor to the S. Howes Co., Silver Creek, N. Y. No. 852,050. See cut.

Grain Door.—George W. Kellogg, Grand Forks, N. D. Filed June 22, 1906. No. 852,331. See cut.

Issued on May 7, 1907.

Grain Drier.—Arthur L. Brannock, Neosho, Mo. Filed October 5, 1905. No. 852,765. See cut.

Grain Door for Cars.—Herbert W. Richards, Chicago, Ill. Filed December 9, 1905. No. 852,906.

With a peck of seed J. C. Halsey of Maxbass, N. D., raised 13 bushels of Salzer's marble wheat last year. He will sow 200 acres this season.

THE CO-OPERATIVES

The Pawnee County Grain and Supply Co. of Larned, Kan., on business of 1906-07 paid a 20 per cent dividend.

The Kansas Independent Grain Dealers' Association, in session at Hutchinson in April, re-elected all of the old officers, which include President C. W. Peckham of Haven and Secretary E. M. Black of Preston.

The Farmers' Elevator at Elgin, Minn., has been offered for rent, "with the understanding that the owners of the house have the privilege of shipping their crops through the house for a reasonable compensation."

KANSAS SHIPPING ASSOCIATION QUIT.

At an annual meeting of the stockholders of the Farmers' Co-operative Shipping Association, held in Topeka in April, it was voted by a stock vote to liquidate the affairs of the company to vote to liquidate the affairs of the company to avoid certain and imminent bankruptcy. The affairs of the Association will be closed as soon as possible.

Mr. Engelhard, president and manager, gave out the following conservative statement of the "decline and fall" of this once arrogant Association:

"The Farmers' Co-operative Grain Shipping Association," said Mr. Engelhard, "was organized at Topeka in May, 1903, as the result of agitation for such an institution that had been going on among the farmers of Kansas, Nebraska and Oklahoma for several years. It was incorporated under the laws of Kansas, with an authorized capitalization of \$200,000, divided into 20,000 shares of \$10 each. Farmers of the three states paid in \$40,000, and with this the Association bought ten or eleven county elevators and began the business of buying and shipping the grain of its members and receiving grain at Kansas City on consignments. C. B. Hoffman, a miller at Enterprise, Kan., who was instrumental in founding the organization, was its first general manager, and James Butler of Topeka its first president.

"During the first year the company made a profit of 30 per cent. It declared a dividend of 1 1/4 cents a bushel on all grain sold by stockholders to the Association. The membership then increased to about 5,000, fully four-fifths of whom did not own over one share of stock each. The purchasing of elevators went on until the number of houses was thirty-seven. The capital represented a valuation of \$130,000.

"During the year 1905 the Association lost \$60,000 as a result of being caught with 275,000 bushels of wheat on its hands in the country and in transit when the Gates 'corner' collapsed in Chicago. This was in April. The market dropped about 33 cents a bushel within a few days. Our wheat was not 'hedged' or protected in any way. Hence the loss. Mr. Hoffman soon retired from the Association, and in July of that year I was elected general manager.

"A hard struggle was made to keep the organization intact, and to recover the lost ground, but the Association continued to sink money until the present year, when the loss reached an aggregate of \$75,000. Among the difficulties encountered was the car shortage of the last several months. There was some trouble attributable to the unfair competitive methods of private shippers in the country. Internal dissensions, which had been encountered almost from the first, multiplied. It became necessary several months ago to begin selling the elevators, and about nineteen were disposed of. We have seventeen houses left, mostly in southern and western Kansas. I anticipate that when these elevators are sold and the Association's affairs finally liquidated, the disbursement to stockholders will be about 40 per cent, or \$4 a share. There are about 13,000 shares out, some members holding as high as thirty.

"It should not be assumed that litigation or a squabble of any kind is likely to ensue, or that any member of the Association will really lose a dollar. The benefits received through the Association's methods of handling grain largely from the grower direct to the miller or the exporter made for the members between \$500,000 and \$1,000,000 during the last four years. Records show that we have handled an average of 3,000,000 bushels of grain annually.

"Among the members there have been many farmers whose loyalty to the Association in the face of discouraging experience was highly commendable. Now, however, there is very little sentiment in favor of a reorganization. In a few scattered localities there may be efforts to maintain local co-operative shipping societies."

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE, RENT OR EXCHANGE.

Good mill and elevator located in fine wheat country. Favorable terms. Address

F. S. R., Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE.

Modern elevator located on Chicago & North Western Railway. Capacity 25,000 bushels; good business and competition good. Will bear investigation. Address

LOCK BOX 713, Sioux Falls, S. D.

ELEVATOR FOR SALE.

Modern elevator of 25,000 bushels for sale. In eastern North Dakota, on Soo Railroad. Good business; good competition; good reasons for selling; everything first-class. Address

LOCK BOX 713, Sioux Falls, S. D.

FOR SALE.

Two elevators, eight miles apart in best corn and oat section in Iowa, doing good grain business. Right price, for cash or good unencumbered land if deal is made at once. Address

T. B., BOX 5, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE

Twenty-thousand-bushel elevator and dwelling house in a good North Dakota wheat town. Elevator in good condition. Six-room house, with hot water heat; good well in house; also cistern, nice lawn and young trees. Address

LOCK BOX 327, Willow City, N. D.

FOR SALE.

One-hundred-thousand-bushel elevator, doing an annual business of 500,000 bushels, located in best grain district of western Indiana, on the Chicago & Eastern Illinois Railroad, about 100 miles from Chicago. The plant has first-class equipment and is in perfect order. Write for full description and particulars to

INDIANA, Box 4, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE.

Plant of Muskegon Milling Co. at Muskegon, Mich., including an Allis mill with capacity of 300 barrels flour, 50 barrels buckwheat, 50 barrels rye and 20 tons feed. New 250-h.p. boiler and new 250-h.p. Corliss condensing engine. 24,000-bushel elevator, and two elevators in nearby towns. Water and rail shipping facilities. Private dock with 18 feet water. Marine elevator and power unloading machinery for cars.

THE MICHIGAN TRUST COMPANY, TRUSTEE, Grand Rapids, Mich.

THREE SPECIAL BARGAINS.

One 10,000-bushel elevator; N. Y. C., western Indiana; ships 100 to 150 cars corn and oats; house good as new; \$4,500 cash.

One N. Y. C. Elevator; western Indiana; will average over 200 cars corn and oats; house good; \$7,000 cash.

One 10,000-bushel elevator; C. H. & D., western Indiana; first-class condition; ships sure 125,000; large territory; good as new; \$5,000 cash. No competition at either of these. Must hurry to get them. Have buyer for Cutler Grain Dryer, good condition.

JOHN A. RICE, Frankfort, Ind.

OLD ESTABLISHED BUSINESS FOR SALE.

In order to close the estate of Samuel Thomas, deceased, the grain depot and business in Phillipsburg, N. J., conducted by him for 42 years, will be sold at private sale. The property has frontage of 60 feet on South Main St. and extends to Belvidere-Delaware branch of the P. R. R.; is improved with large stone and brick building (two stories on street and four stories on railroad side), fitted up with hopper scales, conveyors, and all modern appliances for wholesale and retail grain business, also railroad siding. For further particulars, apply to

SMITH & BRADY, Attorneys for Estate, Phillipsburg, N. J.

ELEVATORS FOR SALE.

We have a large list of extra good bargains in elevators, first-class locations, doing good business. Write for prices and descriptions, giving location you prefer. We furnish managers and buyers for elevators and secure positions for men who wish to change their location. If interested in an elevator or milling proposition be sure and write to us.

IOWA MILL AND ELEVATOR BROKERS, Independence, Iowa.

MACHINERY

ENGINES FOR SALE.

Gasoline engines for sale, 5, 7, 10 and 20 horse-power.

TEMPLE PUMP CO., 15th Place, Chicago, Ill.

PEERLESS GRAIN FEEDERS.

For ear corn and small grain. Something new. Write for prices.

PEERLESS FEEDER CO., Sidney, Ohio.

FOR SALE.

One No. 37 Howes Oat Clipper, good as new. Address

THE ADY & CROWE MERCANTILE CO., Denver, Colo.

FOR SALE.

Six Barnard & Leas 7-foot Centrifugal Reels. Just the thing for dressing flour. Will sell cheap. Address

A. A. ULREY, Fairmount, Ind.

FOR SALE CHEAP.

One Gilbert's Universal Roller Mill. Eight rolls, 6x18 inches. In good condition.

FLOWER CITY CHARCOAL CO., 59 West Ave., Rochester, N. Y.

WANTED

Second-hand grain dryer of 125 bushels per hour capacity. Must be in first-class condition. Address

M'KENZIE CEREAL FOOD & MILLING CO., Quincy, Mich.

FOR SALE.

Gasoline engines; one 54-horse Fairbanks-Morse; one 28, one 16, one 12, 2, 8 and 25 horsepower Sterling Charter. All sizes and prices in small sizes.

A. H. McDONALD, 38 W. Randolph St., Chicago.

FOR SALE.

One A. T. Ferrell & Co., No. 89 Clipper Grain Cleaner, without rolls. This machine has been used but four days and is equipped for cleaning navy beans. Will have whatever screens added that will be required. Address

THE JERSEY PACKING CO., Cincinnati, Ohio.

FOR SALE.

One No. 6 Monitor Dustless Receiving Separator. Two No. 7 Eureka Warehouse Scourers.

One No. 2 1/2 Western Corn Sheller.

One lot second-hand elevators and conveyors.

One lot of second-hand buhr mills and grinders.

THE STRAUB MACHINERY CO., Cincinnati, Ohio.

SPECIAL BARGAINS.

In corn shellers. One No. 2 B. F. Constant Sheller, latest type made. One No. 4½ Western Combined Sheller and Cleaner. One No. 2½ Western Combined Sheller and Cleaner. These machines are practically as good as new and will be sold cheap. Write for prices.

A. S. GARMAN & CO., Akron, Ohio.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS WANTED

TO EXCHANGE.

Illinois corn and wheat farm to trade for good paying grain elevators. Address

J. M. MAGUIRE, Campus, Ill.

WANTED.

Elevator or mill and elevator for good improved Illinois or Iowa farm. Address

IAWA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

LOCATIONS FOR ELEVATORS.

Good locations for elevators and other industries on the line of the Belt Railway of Chicago. Low switching rates and good car supply. For further information address

B. THOMAS, Pres., Room 11, Dearborn Station, Chicago, Ill.

GRAIN AND SEEDS

WANTED.

Oats, corn, feeds and hay of all kinds. Send samples and quotations. Address

SOUTH SHORE GRAIN CO., Quincy, Mass.

A GOOD THING

If you want a grain business in Iowa that will net from \$3,500 to \$5,000 per year on an investment of \$7,000, address G. N., Box 5, care "American Elevator and Grain Trade," Chicago, Ill.

ROOFING AND SIDING.

SYKES STEEL ROOFING CO.

114 W. 19th Place, Chicago

MAKERS OF FIREPROOF WINDOWS

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money



GRAIN RECEIVERS

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Clover Hay Wanted

Our superior facilities and connections with large buyers of HAY and GRAIN enable us to get the best prices. Liberal advances made on shipments.

Daniel McCaffrey's Sons Co.
Pittsburg, Pa.

Reference: Duquesne National Bank.
Washington National Bank.
In the one spot 40 years.



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PITTSBURG, PA.

D. G. Stewart & Geidel

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300,000 bu.

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THE UNION ELEVATOR CO.

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OUR SPECIALTY: RECLEANED ILLINOIS SHELLLED CORN
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MINNEAPOLIS

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MINNEAPOLIS, MINN.

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MILLING WHEAT A SPECIALTY

Marfield, Tearse & Noyes

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GRAIN COMMISSION

CONSIGNMENTS AND ORDERS FOR FUTURES
SOLICITED.

Offices: Chicago, Milwaukee, Minneapolis, Duluth.
Private wires: Chicago and New York.

511-514 New Chamber of Commerce, Minneapolis, Minn.

DECATUR



OUR BIDS ARE GOOD ONES.

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O. MOHR, Mgr.

G. C. HOLSTEIN, Sec'y-Treas.

Mohr-Holstein Commission Co.

29 Chamber of Commerce

MILWAUKEE

Sample Grain a Specialty

BRANCH OFFICES AT CHICAGO, MINNEAPOLIS

CHICAGO

MINNEAPOLIS

J. V. LAUER & CO.

Grain Commission

BARLEY A SPECIALTY

Ship us your next car

Chamber of Commerce MILWAUKEE, WIS.

ST. LOUIS

CONNOR BROS. & CO.

GRAIN

ST. LOUIS, MO.

Daniel P. Byrne & Co.

General Commission Merchants

SUCCESSORS TO

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Established 1854

Incorporated 1887

Grain, Hay, Mill Feed and Seeds

Chamber of Commerce, St. Louis, Mo.

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Memphis Merchants Exchange Little Rock
Little Rock Board of Trade Jefferson Bank
National Hay Association St. Louis
Grain Dealers Nat'l Association Southern Trust Co.
Little Rock

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HOUSTON

Correspondence Solicited

Robinson Cypher Code

FRANK THOMS & CO.

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Gerstenberg & Co.

Commission Merchants

HANDLE ALL GRAINS AND SEEDS

Barley a Specialty

OUR SERVICE WILL PLEASE YOU
CHICAGO

No Order too Large for Me to Execute
GRAIN CONSIGNMENTS MY SPECIALTY
SAM FINNEY 58 BOARD OF TRADE CHICAGO
or too Small to be Appreciated

THE BEST SERVICE

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Grain Commission

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Chicago

Branches

Peoria, St. Louis, Milwaukee

ALL THE TIME

W. H. MERRITT & CO.
Grain Buyers and Shippers

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RUMSEY & COMPANY

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GRAIN, HAY, SEEDS AND PROVISIONS

CASH AND FUTURE DELIVERIES

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GEO. S. DOLE, Pres.

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J. H. DOLE & CO.
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Commission Merchants, Grain and Seeds

We solicit your

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PHILIP H. SCHIFFLIN, Pres. EUGENE SCHIFFLIN, Secy.-Treas.
H. HEMMELGARN, Vice-Pres.

PHILIP H. SCHIFFLIN & CO., Inc.

Successors to

H. HEMMELGARN & CO.

Commission Merchants

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CHICAGO, ILLINOISConsignments of all kinds of Grain and Field
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Good Prices

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Very Best Attention

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MINNEAPOLIS CHICAGO MILWAUKEE

F. E. WINANS

Grain and Field Seeds Commission Merchant

BARLEY, OATS, WHEAT, CORN, RYE

TIMOTHY, CLOVER, FLAX, HUNGARIAN MILLET

6 SHERMAN STREET, CHICAGO

Write us freely on all matters pertaining to grain and field seeds.
Your questions fully and cheerfully answered; particular attention
paid to timothy seed and grain by sample. Consignments
and speculative orders receive our careful personal attention.

CHICAGO

YOUNG & NICHOLS

Established 1883

Grain Commission Merchants

SOLICIT YOUR CONSIGNMENTS AND ORDERS

FOR FUTURES

169 Jackson Blvd., CHICAGO, ILL.



Square Dealing and Top Prices.

If we
have not
handled
your
Chicago
Business,
try us.

MONTAGUE & COMPANY

Grain Re-
ceiving and
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Wheeler Bldg., 6 and 8 Sherman St., CHICAGO.

Tax Free

DENATURED ALCOHOL

Its Bearing Upon Corn Prices

Its Benefit to the Agricultural Industry

A pamphlet sent upon receipt of 10 cents in stamps

E. W. Wagner

99 Board of Trade

Chicago

J. H. WARE E. F. LELAND
O. W. LEE F. J. FAHEYConsign your grain and seeds and send your
Board of Trade Orders to

WARE & LELAND,

400-410 Postal Telegraph Bldg., Chicago.

GRAIN, PROVISIONS,
STOCKS AND COTTON.

Write for our Daily Market Letter.

Your interests are our interests.

Special attention given to cash
grain shipments.

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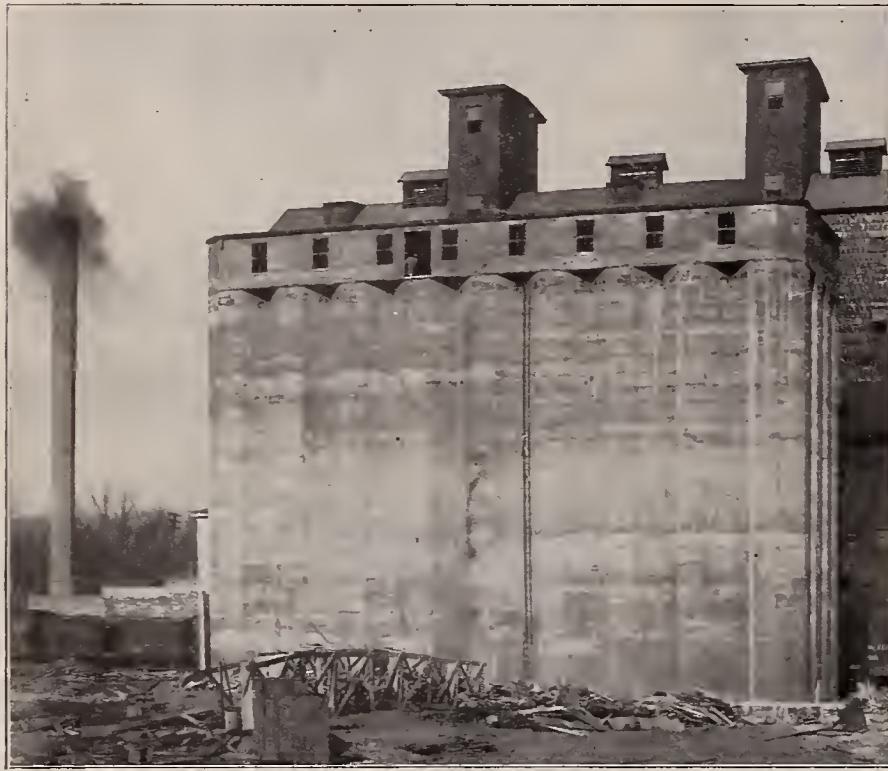
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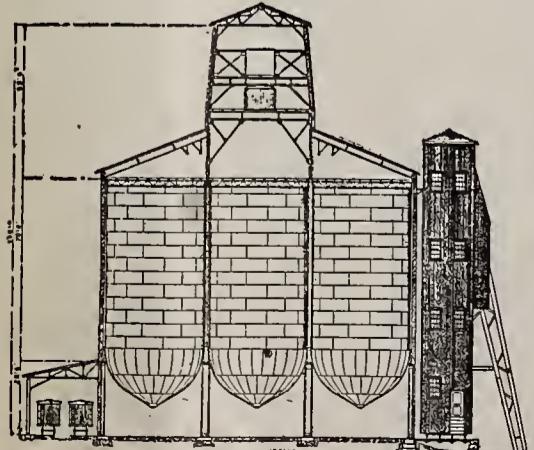
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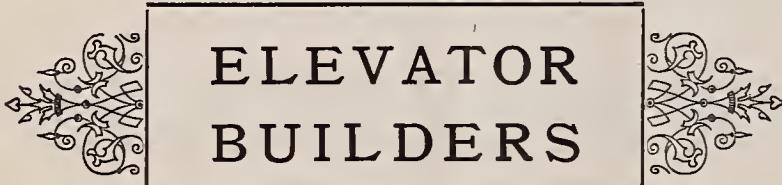
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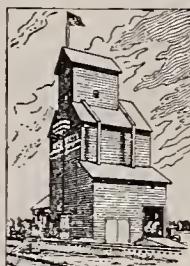
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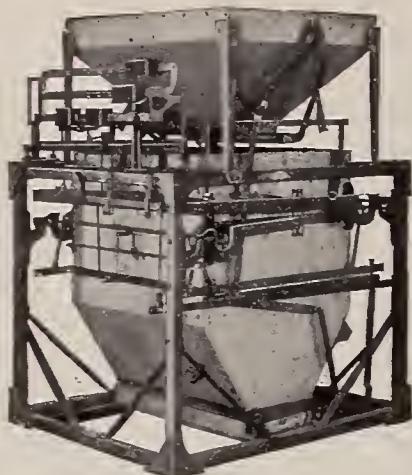
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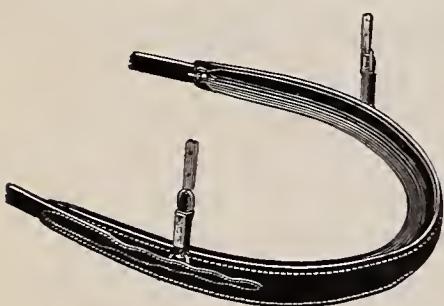
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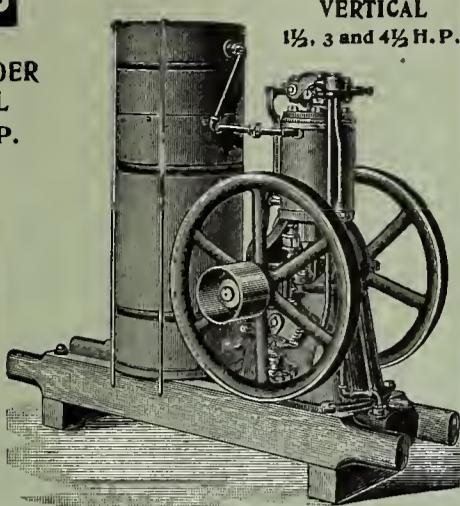
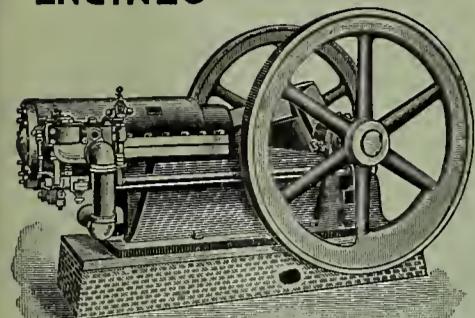
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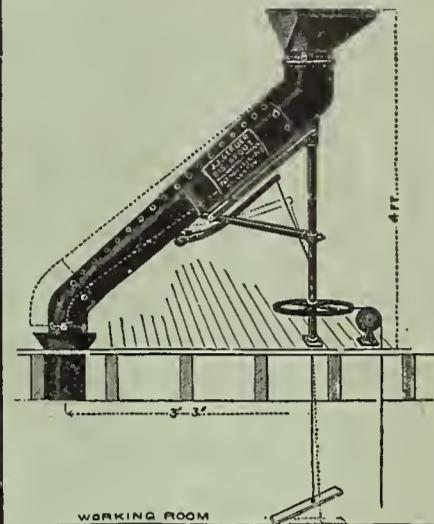
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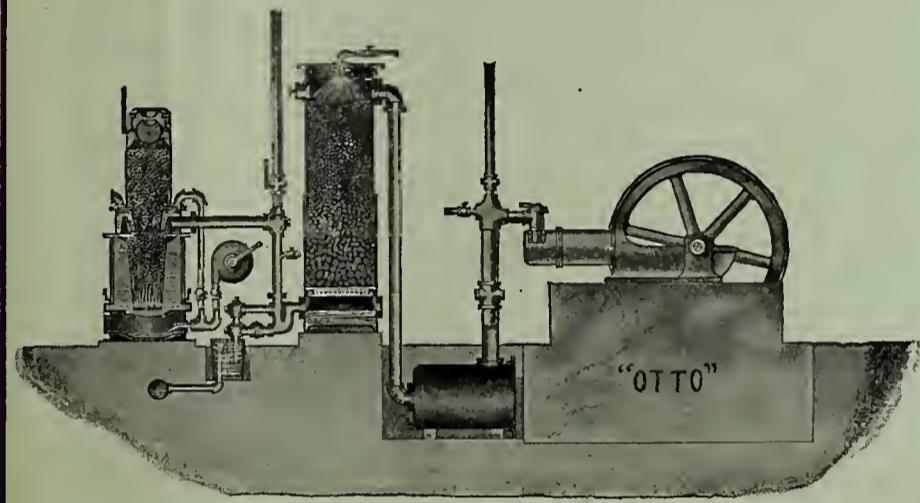
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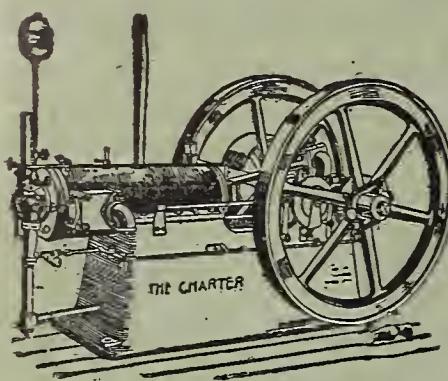
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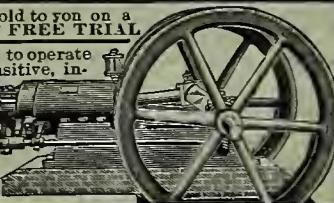
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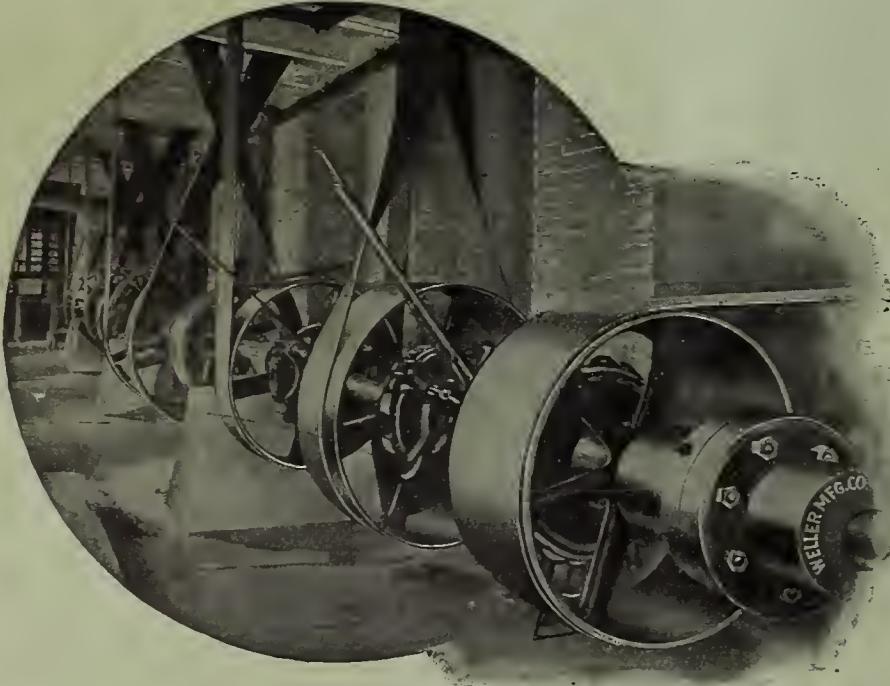
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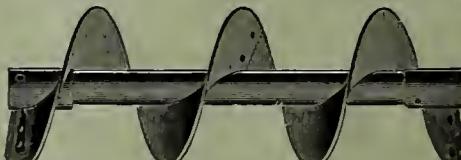


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